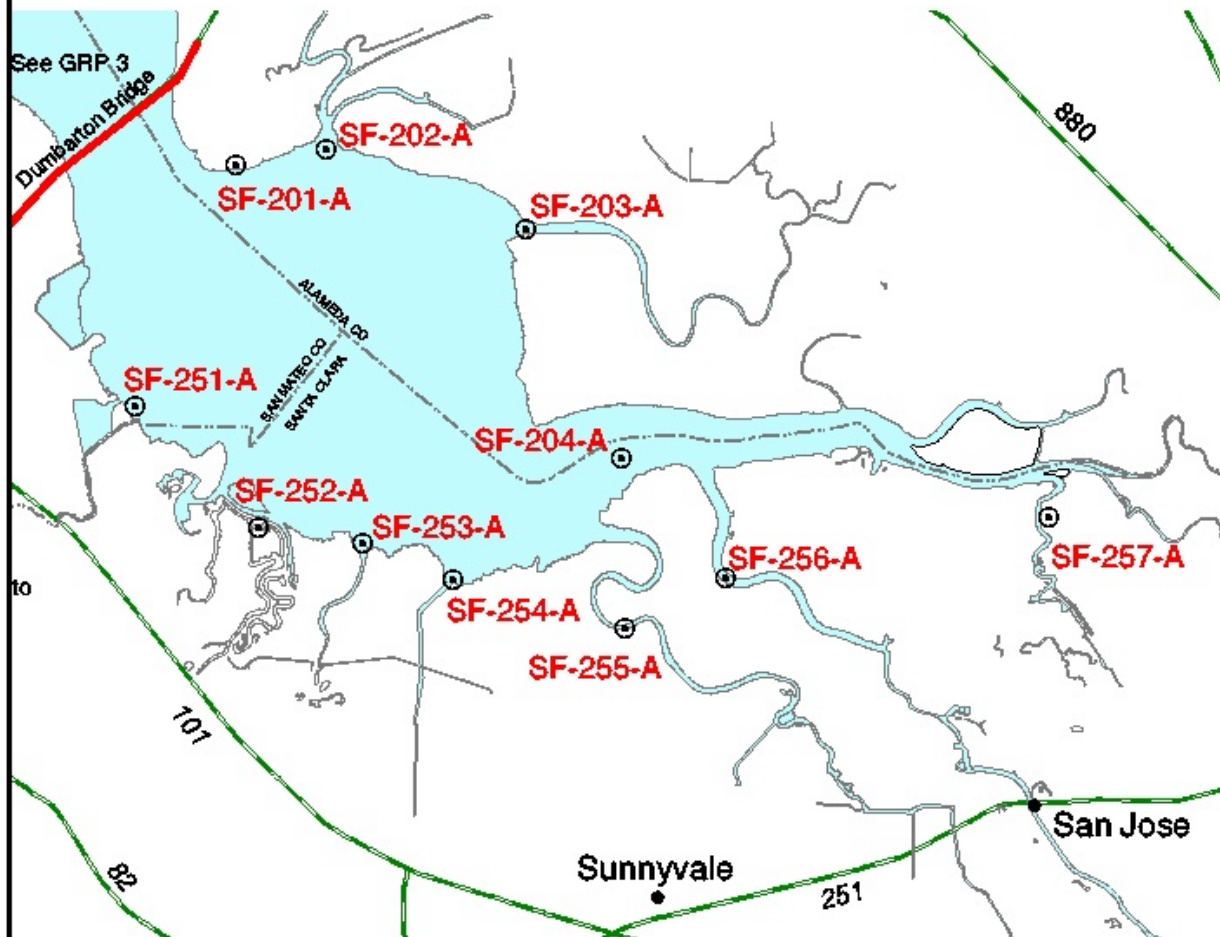




# SF Geographic Response Area 2 South SF Bay Environmentally Sensitive Sites



0 2.5 5 Miles



Note: Marker symbols (⊙) are only site reference and do not indicate full extent of sites.

# Geographic Response Plan - 2

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## Site Index/Response Actions for GRP 2

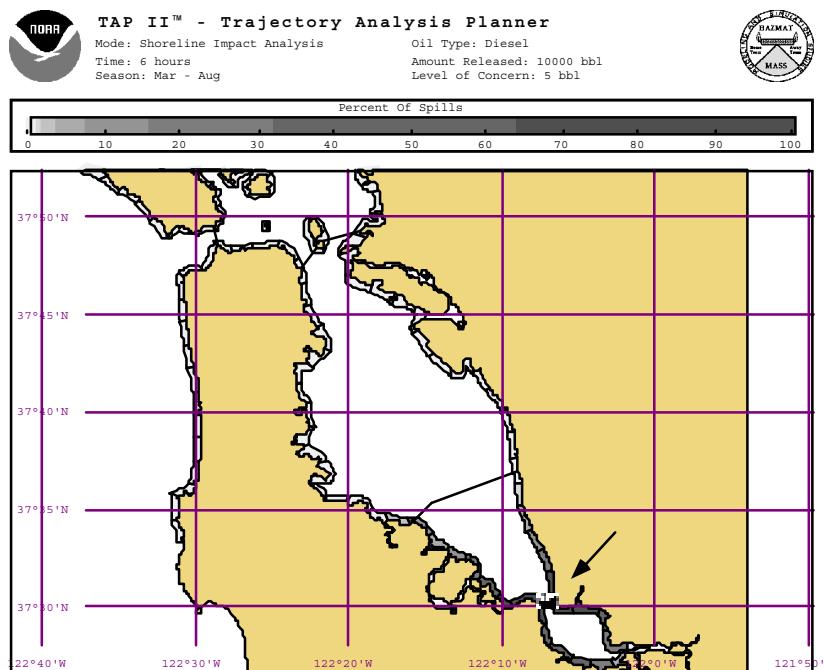
Site ID	Priority	Site Name	Assignment	Date/Time Required	Date/Time Completed
SF-201		Dumbarton Point Marsh/Mudflat			
SF-202		Newark/Plummer Creek			
SF-203		Mowry Slough			
SF-204		Coyote Creek			
SF-251		Palo Alto Marsh			
SF-252		Charleston and Mayfield Sloughs			
SF-253		Mountain View Slough			
SF-254		Stevens Creek			
SF-255		Guadalupe Slough			
SF-256		Alviso Slough			
SF-257		Mallard Slough			

## ACP Sensitive Site Resource List - GRP 2

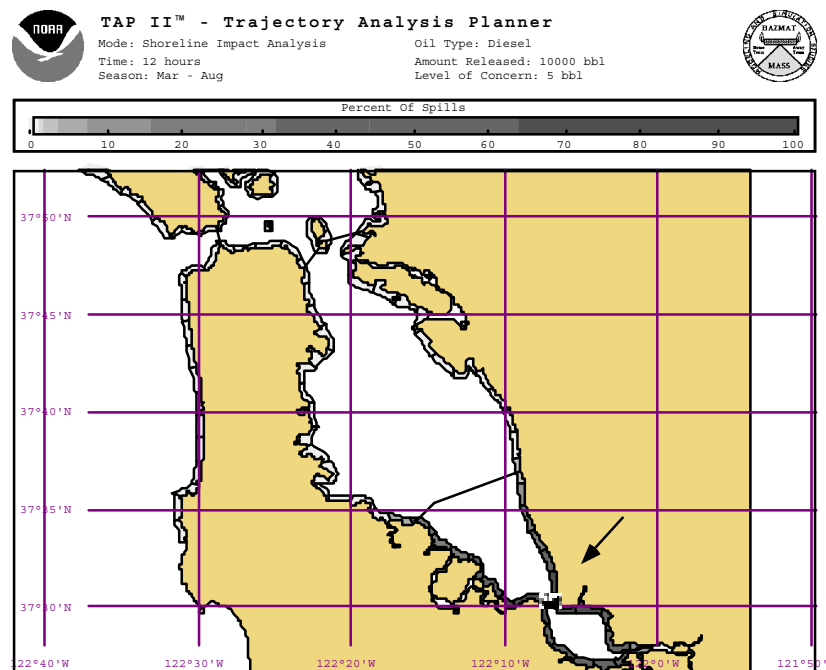
SITE	SUB	SITENAME	Strategy Objective	HBOOM	SWBM	XBOOM	SORB	Bboat # / Type	Skimmer	Special Equipment	Deploy Personnel
2-201	. 1	Dumbarton Point Marsh/Mudflat	SO		2000			2/3	/ skiff		10
		5	Prevent oil from entering marsh front, mudflat, and small channels to the marsh interior.								
	. 2	Dumbarton Point Marsh/Mudflat		3000				3/1			11
		7	Deflection Booming								
	. 3	Dumbarton Point Marsh/Mudflat					8,000	5/3		Sand bags, shovels, 2,000' 3/8" line	15-20 people
		8	Protection booming of shoreline								
2-202	. 1	Newark/Plummer Creek		8,000	1000'		5000'	14/4	1	hovercraft	15 - 20 people
		578	Use exclusion boom to prevent oil from entering channel between bay and site. Use diversion boom to exclude oil from marsh inlet								
2-203	. 1	Mowry Slough		1000	10000			4/3	1 self	hovercraft	15 - 20 people
		578	Deflect oil from marshes to be recovered on-water by skimmers. Prevent oil from entering the slough.								
2-204	. 1	Coyote Creek		8000	200			8/3	3	SPS	30 people
		6,7	Deflect oil away from marshes, keep oil in deep water channel & skim								
	. 2	Coyote Creek			400		400	1/1			8
		5	Minimize oil penetration into the marshes via small tidal channels.								
	. 3	Coyote Creek			4000		SN 4000				
		8	Complete coverage of windward shores to prevent oil from being carried into marshes by wave and tidal action								
2-251	. 1	Palo Alto Marsh		500	500		500	1/3			9
		5	Exclude oil from entering the entrances to Palo Alto Marsh and San Francisco Creek, if time to impact does not permit its deployment or If tidal barrier boom								
	. 2	Palo Alto Marsh		10000	1000		1000	6/3		shallow draft bombast	35-40
		8	Protective booming of marsh front to keep oil from impacting marsh and mudflats.								
2-252	. 1	Charleston and Mayfield Sloughs		2500			500	2/1	2	SSS	10 - 15 people
		6	Deflect oil away from marshes to skimmers.								
	. 2	Charleston and Mayfield Sloughs			1200		1200	1/1			
		5	Exclude oil from entering Charleston Slough								
	. 3	Charleston and Mayfield Sloughs									2
		5	Close all tide gates and salt pond intake structures to exclude oil from expanding to inner marshes and impoundments.								
2-253	. 1	Mountain View Slough			1500		4000	0/2		hovercraft or air boat may be necessary	6-8 PEOPLE
		5	Exclude oil from entering Slough and small marsh channels.								
	. 2	Mountain View Slough					2000	0/2		hovercraft or airboats may be necessary	8
		8	Shore line protection booming.								
2-254	. 1	Stevens Creek			400		800	0/2			3-4
		5	Exclude oil from entering the creek. Deflect oil down-coast.								
	. 2	Stevens Creek					OS 7000	7000			
		8	Protective booming of marsh front								
2-255	. 1	Guadalupe Slough		2500	7500			2/2	2	SPS or SFS	32 people
		5	Prevent oil from entering Guadalupe Slough and adjacent marshes.								
	. 2	Guadalupe Slough			1000			0/2			8
		8	Protective booming of bayfrontage marshes from oiling and oil intrusion.								
2-256	. 1	Alviso Slough		1000	2000		2000	0/2	2	SFS	8 - 10 people
		5	Collection booming to prevent oil from entering Alviso Slough.								
	. 2	Alviso Slough							1	SFS	
		7	Deflect oil past slough and keep oil in Coyote Creek for skimming.								
	. 3	Alviso Slough									
		8	Protective booming of marsh front near mouth.								
2-257	. 1	Mallard Slough		3500				2/2	1	SPS	12-15
		5	Protect slough by excluding oil from Coyote Creek. Collect oil at Coyote Creek/Alviso Slough.								

## PROBABILITY OF OIL REACHING EACH SITE STRATEGY IN GRP2

### GRP 2



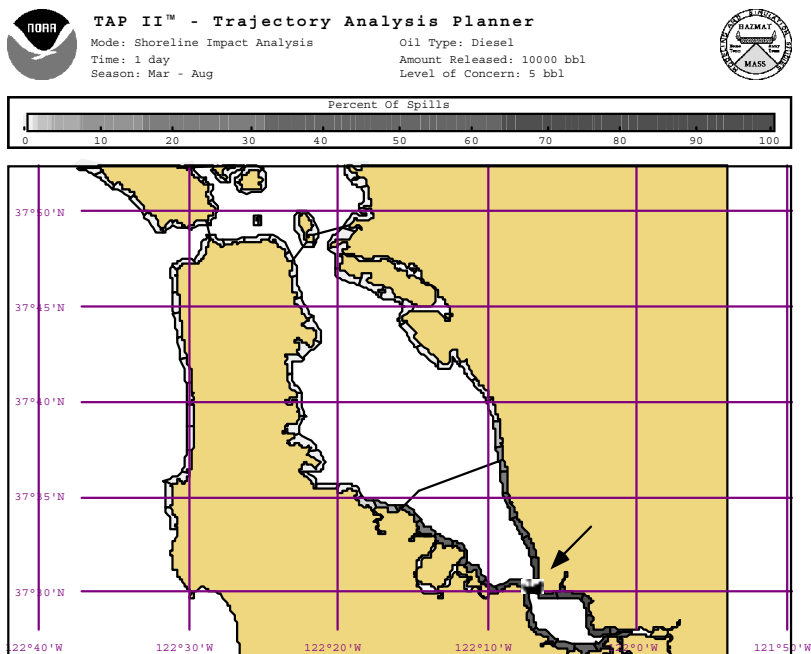
6 hours from start of spill



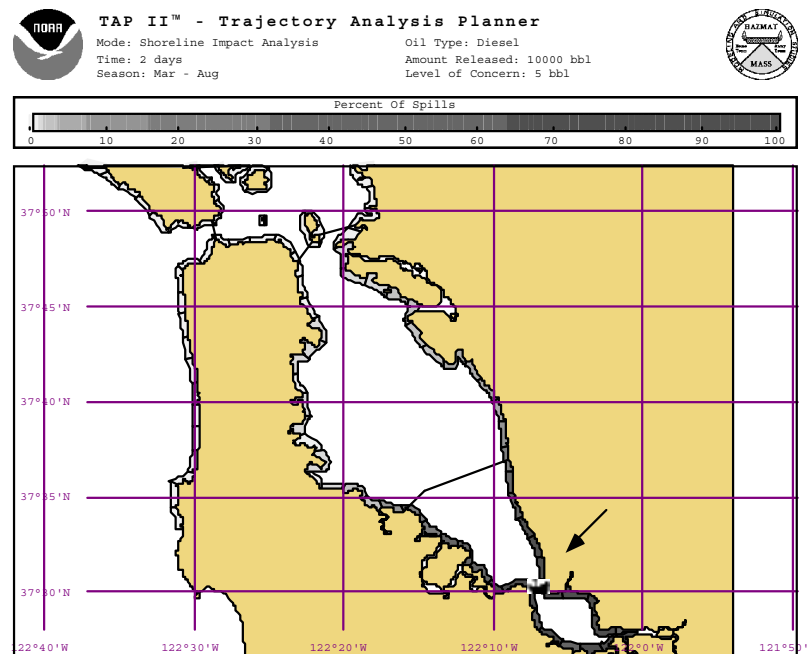
12 hours from start of spill

**TAP II Maps for GRP2 Scenario:** Spill of 10,000 bbls of diesel at the Dumbarton Bridge in the Spring. Arrow indicates spill origin. The shades of grey at each impacted site correspond to a percentage in the legend of the number of spill scenarios (from 500 runs of various wind, tides and currents) that brought more than 5 bbls (= Level Of Concern) of oil to that site in the specified time frame (6 hours or 12 hours).

## GRP 2



24 hours from start of spill



48 hours from start of spill

**TAP II Maps for GRP2 Scenario:** Spill of 10,000 bbls of diesel at the Dumbarton Bridge in the Spring. Arrow indicates spill origin. The shades of grey at each impacted site correspond to a percentage in the legend of the number of spill scenarios (from 500 runs of various wind, tides and currents) that brought more than 5 bbls (= Level Of Concern) of oil to that site in the specified time frame (24 hours or 48 hours).

Table of Percent of Spills that bring oil (> 5bbls) to each site from the GRP 2 scenario.

ACP SITE#	ES	SITENAME	LAT N (Deg. Min.)	LONG W (Deg. Min.)	6 HOURS (% prob)	12 HOURS (% prob)	24 HOURS (% prob)
2-367	A	Greco Island/Ravenswood Slough	37 31	122 12	100	100	100
2-201	A	Dumbarton Point Marsh/Mudflat	37 30	122 06	95	100	100
2-307	A	Coyote Hills Slough Marshes	37 29	122 02	80	92	95
2-202	A	Newark/Plummer Creek	37 30	122 05	60	78	90
2-306	A	Alameda Creek Marshes	37 29	122 02	35	58	80
2-251	A	Palo Alto Marsh	37 28	122 06	35	49	55
2-252	A	Charleston and Mayfield Sloughs	37 27	122 05	35	49	55
2-203	A	Mowry Slough	37 29	122 02	34	59	83
2-364	A	Bair Island	37 32	122 14	31	45	56
2-366	A	Corkscrew Slough	37 31	122 14	31	45	56
2-204	A	Coyote Creek	37 28	122 02	27	55	84
2-253	A	Mountain View Slough	37 27	122 05	22	37	47
2-363	A	Steinberger Slough	37 32	122 14	14	25	25
2-362	A	Belmont Slough	37 33	122 15	9.6	17	25
2-254	A	Stevens Creek	37 27	122 04	5.6	30	48
2-255	A	Guadalupe Slough	37 27	122 02	2.4	25	53
2-256	A	Alviso Slough	37 27	122 01	0.05	13	40
2-257	A	Mallard Slough	37 27	121 58	0.05	13	40



# Dumbarton Point Marsh/Mudflat - Site Summary

2-201-A

County: Alameda  
USGS: Mountain View

GRP:2 Latitude 37 30.0 N Longitude 122 06.0 W  
OSPR Map: 158-160 Last ACP 07/01/1996

## SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)

A large contiguous section of marsh located along the east side of south San Francisco Bay and bounded on the northwest by the

Southern Pacific Railroad levee, the east by Newark Slough, and the south and west by San Francisco Bay. This is a marsh with

many primary slough channels entering the marsh from its southern shore. These channels present an opportunity for oil to enter the

interior of the marsh. There is a wild mudflat between the main channel of the bay and the marsh. This site is part of the San

Francisco Bay National Wildlife Refuge.

## SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)

"A" priority year-round due to salt marsh, mudflat, and special status species habitat.

## RESOURCES AT RISK

### HABITATS AT RISK:(biological habitats including time of year when most sensitive and vulnerable )

This marsh is one of the most important California clapper rail nesting areas in the south bay and a harbor seal haul out area

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

Endangered: California clapper rail, California brown pelican, peregrine falcon. CA Spp of Special Concern: saltmarsh common

yellowthroat. Shorebirds, waterfowl, wading birds, water birds, raptors

CA Spp of Special Concern: salt marsh wandering shrew

## CULTURAL and ARCHEOLOGICAL SENSITIVITIES

Ohlone cultural sites are nearby. For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance

Type	Name	Organization	Phone	FAX
BTE	Region 3 Office	Ca Dept Fish & Game	(707) 944-4400	
ELT	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
BTE	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
E	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
B	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	
LO	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

# 2-201 -A Dumbarton Point Marsh/Mudflat - Site Strategy

County: Alameda

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 30.0 N

Longitude  
122 06.0 W

**SITE LOCATION: boundaries, landmarks, area to locate and delimit the site**

**Update**

A large contiguous section of marsh located along the east side of south San Francisco Bay and bounded on the northwest by the Southern Pacific Railroad levee, the east by Newark Slough, and the south and west by San Francisco Bay.

**HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site**

Railroad Bridge, Dumbarton Bridge, powerline and towers, shallow water, soft mud can all be hazards to response activity.

**POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS:** (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

The concern is to prevent oil from being carried into the marsh via large and small tidal channels and minimize oiling of marsh fronts.

Should oil enter the marsh there will be injury and death of marsh vegetation, small mammals, shorebirds and waterfowl, including endangered and threatened species. There is also the concern that response and cleanup activity will result in trampling of marsh, trampling of oil into sediments, and disturbing wildlife. Please exercise appropriate caution.

## SITE STRATEGIES

### Strategy 2-201.1

(USCG Strategic Objective: 5 ) Dates: SISRS Approved last tested ACP date  
07/01/1996

#### Objective or Prevention Condition

Prevent oil from entering marsh front, mudflat, and small channels to the marsh interior.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

"Plug" small slough channels with fence boom or 4x4 swamp boom and sorbent booms. Block culvert near pump house with earth or steel plate.

### Strategy 2-201.2

(USCG Strategic Objective: 7 ) Dates: SISRS Approved last tested ACP date  
07/01/1996

#### Objective or Prevention Condition

Deflection Booming

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Deploy deflection boom off mudflats.

### Strategy 2-201.3

(USCG Strategic Objective: 8 ) Dates: SISRS Approved last tested ACP date  
07/01/1996

#### Objective or Prevention Condition

Protection booming of shoreline

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Line marsh front with bushy boom and/or sorbent boom. Harbor boom at shelf break.

## Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-201.1		2000				2/3				10	several times/day	5
2-201.2	3000			20-25#w/10'chain each		3/1				11		7
2-201.3					8,000	5/3			Sand bags, shovels, 2,000' 3/8" line	15-20 people		8

## LOGISTICS

**DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)**

Hwy 880 to Hwy 84 West. Thornton Ave. exit south to Marshlands Rd. Take Marshlands Rd. out to bay front near foot of Dumbarton Bridge. Access levee road via contact with San Francisco National Wildlife Refuge HQ. Nearest large boat ramp is at Redwood City, small boat launch near Refuge HQ on Newark Slough.

**LAND ACCESS LEVEL:** (foot only, 2WD, large truck, 4WD, road limitations...seasonal...locked gates)  
ALL ACCESS LEVELS OK

#### WATER LOGISTICS:

Access limitations: depth, obstructions: WIDE MUDFLATS, SHALLOW WATER

Boat Launching, Loading, Docking Nearest large boat ramp is at Redwood City, small boat launch near San Francisco National and Services Available: Wildlife Refuge HQ on Newark Slough.

#### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:





Large staging area available at Redwood City Harbor. Small staging area and field post possible at National Wildlife Refuge HQ. Command Post available at Alameda County OES.

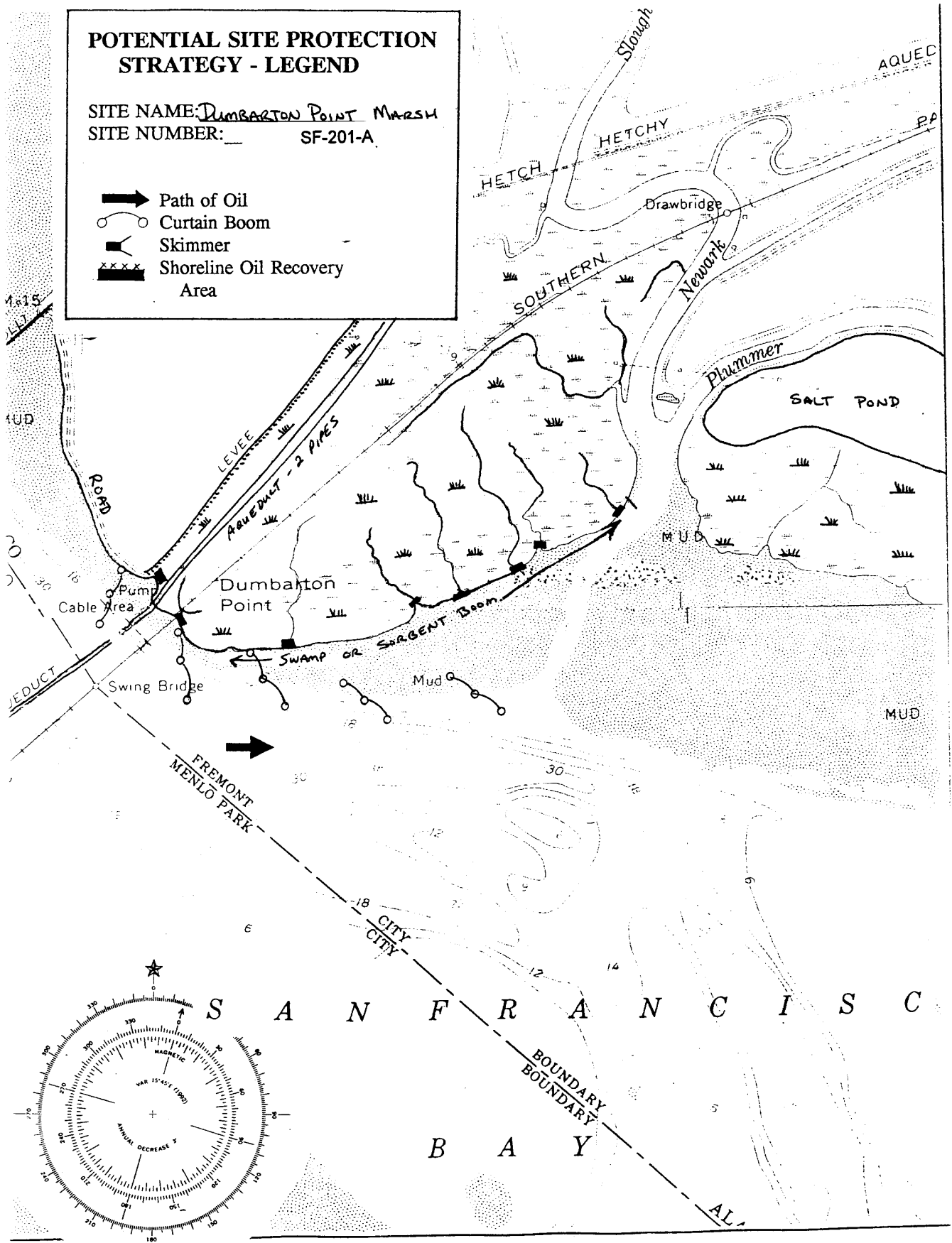
**COMMUNICATIONS LIMITATIONS / PROBLEMS:** X No Problems Radio Pager Cell phone

#### ADDITIONAL COMMENTS

# POTENTIAL SITE PROTECTION STRATEGY - LEGEND

SITE NAME: DUMBARTON POINT MARSH  
 SITE NUMBER:        SF-201-A

-  Path of Oil
-  Curtain Boom
-  Skimmer
-  Shoreline Oil Recovery Area



SCALE 1:24,000

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# Newark/Plummer Creek - Site Summary

2-202-A

County: Alameda  
USGS: Mountain View

GRP: 2

Latitude 37 30.0 N  
OSPR Map: 158-160

Longitude 122 05.0 W  
Last ACP 07/01/1993

## SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)

Newark Slough and Plummer Creek join and form one outlet to South San Francisco Bay two miles SE of Dumbarton Bridge. Extensive salt marsh areas with numerous tidal channels extend over a mile to the north and south of the inlet. The entire area including much of the offshore mudflats is part of the USFWS South Bay Wildlife Refuge. Mudflats are shallow and extensive and are cut with deep tidal channels. Bay frontage is cordgrass marsh. Newark Slough and Plummer Creek are leveed and bordered by Cargill salt ponds.

## SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)

"A" priority year-round for marshes, harbor seals, and clapper rail.

## RESOURCES AT RISK

### HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )

This site has extensive and prime pickleweed and mudflat habitats vulnerable to oiling. These habitats support rich flora and fauna, including Special Status Species, in high numbers.

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

Endangered: California clapper rail, California brown pelican, California least tern, peregrine falcon.

Endangered: saltmarsh harvest mouse. Harbor seals use the west shore of Newark Slough near the mouth as a haulout and rookery area. There is a moderate risk year round and high risks to pups during lactation due to possible ingestion of petroleum products from female's fur. Spring breeding season: 15 March - 10 June. Lactation period is 3 to 5 weeks long. Spring: 100 adults and pups; Fall/Winter: 5-40 seals

Species of Special Concern: Hairless Allocarya aka Hairless popcornflower plant (Plagiobothrys glabir).

## CULTURAL and ARCHEOLOGICAL SENSITIVITIES

Ohlone cultural sites are nearby. For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance

Type	Name	Organization	Phone	FAX
E	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
B	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	
	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

## 2-202 -A Newark/Plummer Creek - Site Strategy

County: Alameda

CHART 18654 San Francisco Bay Southern Part

Latitude , Longitude

37 30.0 N, 122 05.0 W

### SITE LOCATION: boundaries, landmarks, area to locate and delimit the site

### Update

Newark Slough and Plummer Creek join and form one outlet to South San Francisco Bay two miles SE of Dumbarton Bridge. Extensive salt marsh areas with numerous tidal channels extend over a mile to the north and south of the inlet.

### HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site

Shallow water. Levee roads impassable in winter.

### POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS:

(regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

The primary concern is oil penetrating the marsh by being carried up Creeks and small tidal channels. The secondary concern is oiling of harbor seals and impacts to marsh plants and wildlife. First objective is to exclude oil from entering marsh via tidal channels; secondary objective is to deflect oil away from marsh; and the final objective is protective booming of marshfront. There is always the concern that and cleanup activity will damage marshes: trampling of vegetation, trampling oil into sediments, and disturbing wildlife.

## SITE STRATEGIES

### Strategy 2-202.1

(USCG Strategic Objective: 578 )

Dates: SISRS Approved last tested ACP date  
07/01/1993

### Objective or Prevention Condition

Use exclusion boom to prevent oil from entering channel between bay and site. Use diversion boom to exclude oil from marsh inlet

### Technique Details

Check here means

" No strategy diagram":

( )

Check here means

"Contact CCC":

( )

1. Deflection booming off mudflat break with harbor boom.
2. "Plug" small finger sloughs and channels inside Newark Slough with fence boom, sorbent, and swamp boom.
3. Deploy curtain boom from west side of mouth back into Plummer Creek's eastern shore. Also deploy harbor boom along east shore of mouth from bayfront back to skimmer pocket.
4. Use skimmer in channel or possibly vac truck with skimmer from shore levee in Plummer Creek (dry season only).

## Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-202.1	8,000	1000'		40-25#w/10'chain each	5000'	14/4	1		hovercraft	15 - 20 people	continuous	578

## LOGISTICS

### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Take Hwy 880 south to the Thornton Avenue exit. Proceed east on Marshland Road. Need San Francisco National Wildlife Refuge assistance for access via Levee Road. Access to Newark Slough possible through the Cargill Plant.

NOTE: Access to levee only during dry months. Access may be limited to small vehicles. Tractor trailer rigs may not be able to access

LAND ACCESS LEVEL: (foot only, 2WD, large truck, 4WD, road limitations...seasonal..locked gates)  
2WD,4WD,ATV,FT DRY SEASON ONLY, hovercraft in wet season

### WATER LOGISTICS:

Access limitations: depth, obstructions: SHALLOW DRAFT VESSELS <6'

Boat Launching, Loading, Docking Launch ramps at Redwood City for large vessels

and Services Available: Small boat launch (punts, airboats, kayaks) at SFBNWR HQ on Newark Slough

### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Large staging area available at Redwood City Harbor. Small staging area and field post possible at National Wildlife Refuge HQ. Command available at Alameda County OES.





### COMMUNICATIONS LIMITATIONS / PROBLEMS:

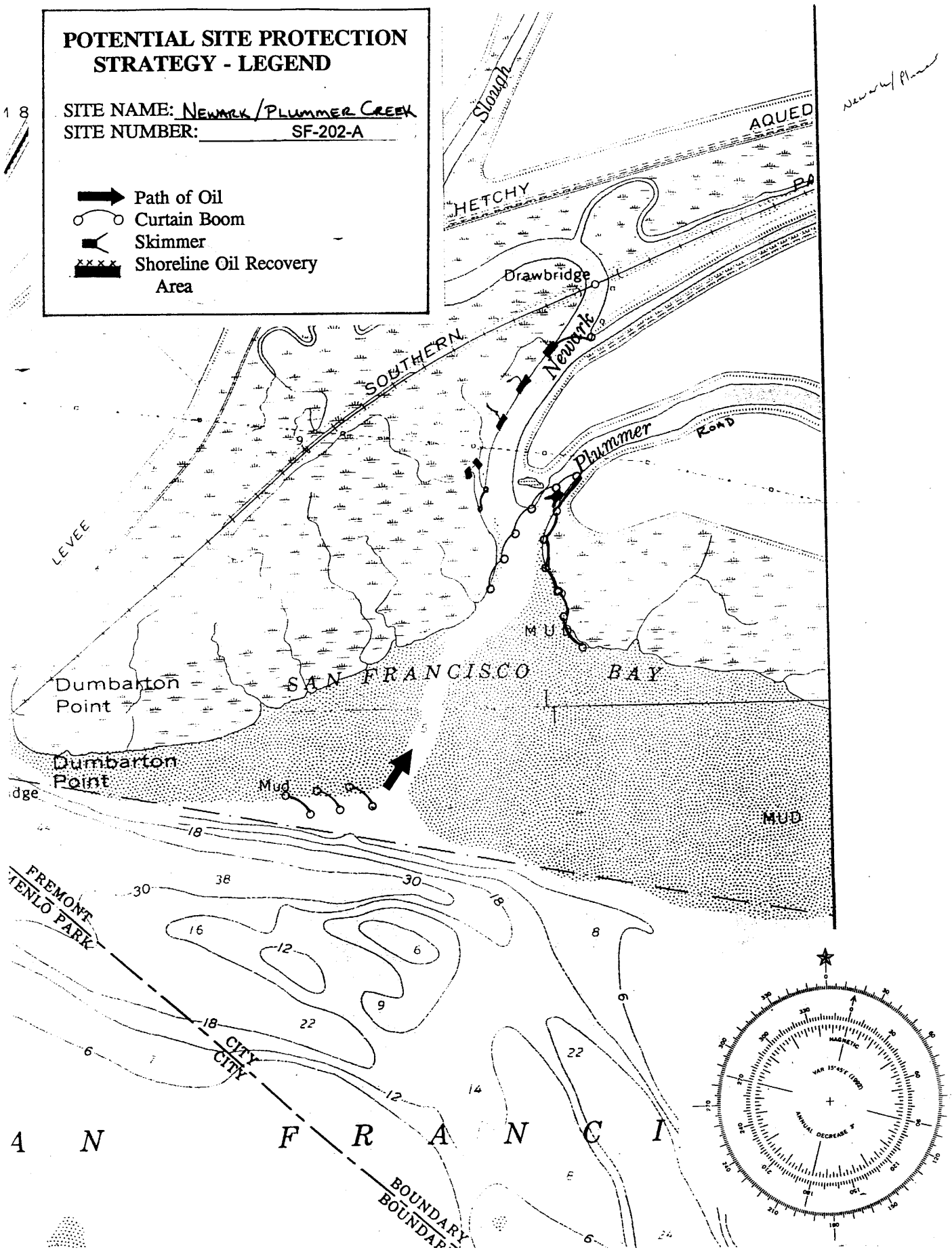
X No Problems Radio Pager Cell phone

### ADDITIONAL COMMENTS

# POTENTIAL SITE PROTECTION STRATEGY - LEGEND

SITE NAME: NEWARK/PLUMMER CREEK  
 SITE NUMBER: SF-202-A

-  Path of Oil
-  Curtain Boom
-  Skimmer
-  Shoreline Oil Recovery Area



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# Mowry Slough - Site Summary

2-203-A

County: Alameda  
USGS: Mountain View

GRP: 2      Latitude 37 29.0 N      Longitude 122 02.0 W  
OSPR Map: 158-160      Last ACP      07/01/1996

## SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)

A large linear marsh along the east side of south San Francisco Bay bounded on the northwest by Newark Slough, on the east by Cargill Salt pond levees, and on the west by San Francisco Bay. The slough is a channel bordered by mudflats and marshes. The adjacent pickleweed and cordgrass marshes are included in this site. Many primary slough channels are present along its length, conveying water into the interior portions of the marsh. Much of this site is included in the USFWS South San Francisco Bay Refuge.

## SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)

"A" priority for protection year-round due to extreme vulnerability of saltmarsh and special status species/habitat (see below).

## RESOURCES AT RISK

### HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )

This is an extensive cordgrass marsh with pickleweed marsh in the higher intertidal marsh.

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

Endangered: California Clapper rail (This is one of the most important California Clapper rail nesting areas in the So. Bay), Peregrine falcon, California Brown pelican.  
CA Species of Special Concern: Salt Marsh Common Yellowthroat.  
Shorebirds, waterfowl, wading birds, waterbirds, raptors.

Endangered: Salt Marsh Harvest mouse  
CA Species of Special Concern: Salt Marsh Wandering Shrew  
seals - can reach 350 adults and 100 pups during spring breeding season, and 70 seals during fall/winter.  
This is also the primary harbor seal rookery in SF bay.  
Fish .

Invertebrates.  
Pickleweed and Cordgrass marshes

## CULTURAL and ARCHEOLOGICAL SENSITIVITIES

Ohlone cultural sites are nearby. For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance

Type	Name	Organization	Phone	FAX
	City of Alameda, PD	Alameda Police -non emergency	(510) 748-4508	
	Rick Cooper	BCDC	(415) 904-5271	(415) 904-5400
	Region 3 Office	Ca Dept Fish & Game	(707) 944-4400	
	Bob Douglas	Cargill Salt	(510) 790-8156	
	Diane Kopeck	Earth Island Institue (seals)	(650) 728-5816	
	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	

## 2-203 -A Mowry Slough - Site Strategy

County: Alameda

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 29.0 N

Longitude  
122 02.0 W

**SITE LOCATION: boundaries, landmarks, area to locate and delimit the site**

**Update**

A large linear marsh along the east side of south San Francisco Bay bounded on the northwest by Newark Slough, on the east by Cargill Salt pond levees, and on the west by San Francisco Bay.

**HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site**

Levee roads impassable in winter. Shallow water. Seas to 2 feet.

**POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS:** (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

The concern is to prevent oil from being carried into the marsh via large and small tidal channels and minimize oiling of marsh fronts.

Should oil enter the marsh there will be injury and death of marsh vegetation, small mammals, shorebirds and waterfowl, including endangered and threatened species. There is also the concern that response and cleanup activity will result in trampling of marsh, trampling of oil into sediments, and disturbing wildlife. Please exercise appropriate caution.

### SITE STRATEGIES

#### Strategy 2-203.1

(USCG Strategic Objective: 578 )

Dates: SISRS Approved last tested ACP date  
07/01/1996

#### **Objective or Prevention Condition**

Deflect oil from marshes to be recovered on-water by skimmers. Prevent oil from entering the slough.

#### **Technique Details**

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. Offshore mechanical collection with on-water recovery task force (see GRP-2-400).
2. Use 18" curtain boom or double layers of smaller boom to deflect oil from marshes into skimmer in Mowry Slough channel near mouth.
3. "Plug" small slough channels along marshfront w/ fence boom or 4x4 swamp boom and sorbent booms.
4. Line marsh front with bushy boom (oil snare) and/or sorbent booms.

### Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-203.1	1000	10000		50-25#w/10'chain each		4/3	1	self propelled	hovercraft	15 - 20 people	continuous	578

### LOGISTICS

**DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)**

Access area through Cargill Plant (from north) and Durham Landfill (from south).

**LAND ACCESS LEVEL:** (foot only, 2WD, large truck, 4WD, road limitations...seasonal...locked gates)  
2WD,LG TRK,4WD,ATV DRY SEASON, hovercraft in wet season

#### **WATER LOGISTICS:**

Access limitations: depth, obstructions: SHALLOW DRAFT VESSELS <6'

Boat Launching, Loading, Docking Vessel launch ramp and services at Redwood City. Small vessels may launch in Newark and Services Available: Slough near National Wildlife Refuge HQ at high tide.

#### **FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:**

Large staging area available at Redwood City Harbor. Small staging area and field post possible at National Wildlife Refuge HQ. Command Post available at Alameda County OES.





#### **COMMUNICATIONS LIMITATIONS / PROBLEMS:**

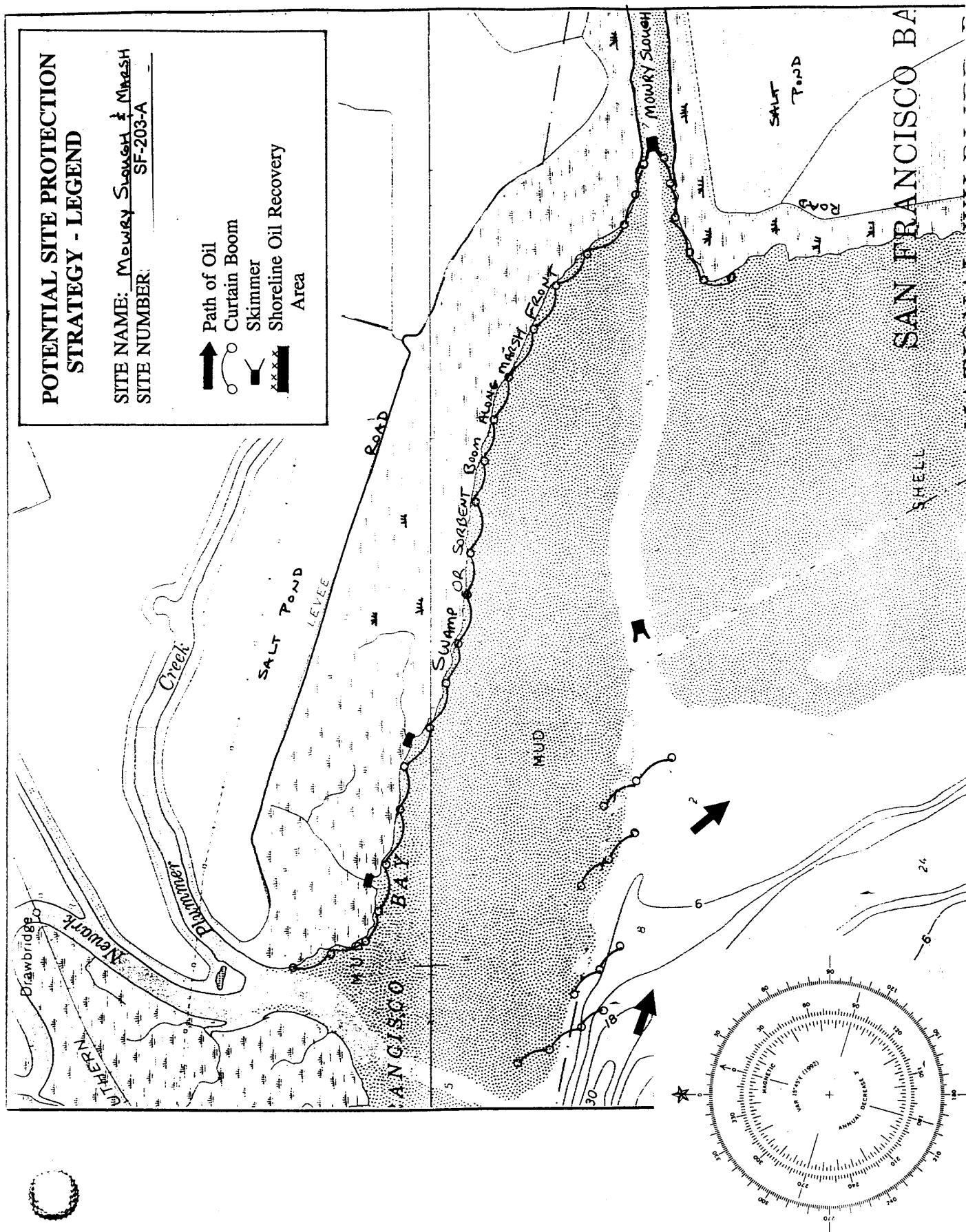
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#### **ADDITIONAL COMMENTS**

SITE NAME: Moway Slough & Marsh  
SITE NUMBER: SF-203-A

SITE NAME: Moway Slough & Marsh  
SITE NUMBER: SF-203-A

 Path of Oil  
 Curtain Boom  
 Skimmer  
 Shoreline Oil Recovery Area



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# Coyote Creek - Site Summary

2-204-A

**County:** Alameda, Santa Clara  
**USGS:** Mountain View

**GRP: 2**      **Latitude** 37 28.0 N      **Longitude** 122 02.0 W  
**OSPR Map:** 160      **Last ACP Update** 07/01/1996

## **SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)**

This site extends from the mouth of Coyote Creek at the southeast corner of South San Francisco Bay upstream to Hwy 237 and includes all marshes and tributaries not included in other sites. Coyote Creek is the primary drainage for the Santa Clara Valley. The mouth is five miles southeast of the Dumbarton Bridge and the mouth is over a mile wide. Extensive marshes and mudflats occur near its mouth and along the creek's shores. The mudflat along the north shore has deeply carved channels (5'+) from the marsh to the deep water channel. Alviso Slough branches off its south side not far from the mouth.

## **SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)**

This site "A" priority year-round as do all marshes, because of vulnerability of marsh plants and wildlife to oil.

## **RESOURCES AT RISK**

### HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )

There are extensive marshes and mudflat along the creek: pickleweed and cordgrass. These marshes support a rich marsh flora and fauna including T&E species.

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

Sensitive bird species found here include: Endangered - California clapper rail, California brown pelican, peregrine falcon, California least tern; Threatened - western snowy plover; California Species of Special Concern: saltmarsh common yellowthroat, Alameda song sparrow. Also, large numbers of a wide variety of birds nest and winter here: shorebirds, waterfowl, wading birds, and waterbirds.

Sensitive mammals species found here include: salt marsh harvest mouse and salt marsh wandering shrew. Harbor seals haul out along north side of creek.

The intertidal mudflats are important to fish and shellfish - clams

## **CULTURAL and ARCHEOLOGICAL SENSITIVITIES**

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## **KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance**

Type	Name	Organization	Phone	FAX
ELT	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institute (seals)	(650) 728-5816	
EBT	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
EBT	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
B	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	
LO	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

## 2-204 -A Coyote Creek - Site Strategy

County: Alameda, Santa Clara

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 28.0 N

Longitude  
122 02.0 W

### SITE LOCATION: boundaries, landmarks, area to locate and delimit the site

This site extends from the mouth of Coyote Creek at the southeast corner of South San Francisco Bay upstream to Hwy 237 and includes all marshes and tributaries not included in other sites.

Aircraft, beware of overhead power lines and towers. Vessels beware of shallow water.

### POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS: (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

Primary concern is to stop oil from entering (or, if oil originates inland, leaving) the Creek by exclusion booming the mouth. Once oil has entered the creek, the concern is that oil will be transported to the interior of bordering marshes via the deep side tidal channels. If marshes become oiled, concerns are that marsh may become damaged by cleanup and foot traffic and oil may be trampled into sediments.

Minimize damage to plants, wildlife and birds and foot traffic.

## SITE STRATEGIES

### Strategy 2-204.1

(USCG Strategic Objective: 6,7 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Deflect oil away from marshes, keep oil in deep water channel & skim

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. Deflection boom placed off NW point at creek mouth. Possibly use 4x4 swamp boom across marsh and mudflat then connect to harbor boom in channel to deflect oil away from marsh and mudflats into deep water channel.
2. Short segments of harbor boom deflection can be placed along north side mudflat to keep oil in channel. Can use powerline tower supports as boom attachment points.
3. Skimmers (3 SPS) to operate at mouth of Coyote Creek, at split of Alviso Slough and Coyote Creek.

### Strategy 2-204.2

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Minimize oil penetration into the marshes via small tidal channels.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

"Plug" small slough channels along marshfront on N. side with fence boom or 4x4 swamp and sorbent booms.

### Strategy 2-204.3

(USCG Strategic Objective: 8 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Complete coverage of windward shores to prevent oil from being carried into marshes by wave and tidal action

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Line marshfront with bushy boom, oil snare, swamp boom, or sorbent boom.

## Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-204.1	8000	200		many large	400	8/3	SPS		3	30 people	continuous	6,7
2-204.2		400		many + stakes						8		5
2-204.3		4000	SN 4000									8

## LOGISTICS

### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Take Hwy 880 south and exit at West Warren Avenue. Turn right on West Warren Avenue and follow it to Fremont Blvd. Turn right on Fremont Blvd. and left on the next road. Follow this road to where it crosses a dirt road. Turn right and follow this road to where it crosses Coyote Creek (first collection point) and follow it across to the dead end slough to the second collection point. Access to Coyote Creek and Mowry Slough is possible through Durham Landfill off of Automall Road. South side access available through Alviso to Cargill

**LAND ACCESS LEVEL:** (foot only, 2WD, large truck, 4WD, road limitations...seasonal...locked gates)  
2WD,LG TRK,4WD,ATV When levees are dry.

### WATER LOGISTICS:

Access limitations: depth, obstructions: Very shallow, beware of tides.

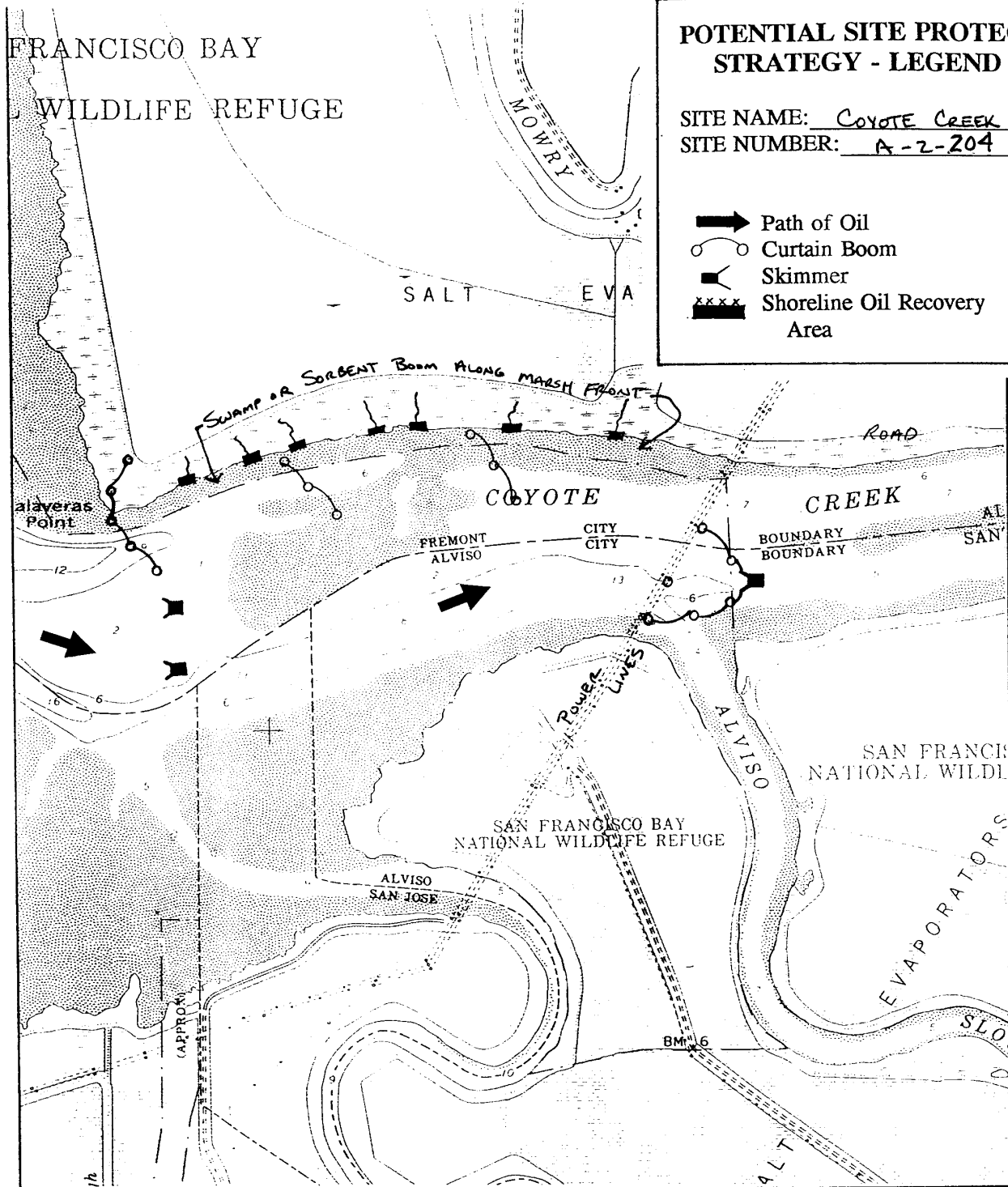
Boat Launching, Loading, Docking Launch ramp at Redwood City and possibly at Alviso Slough for smaller boats at high tide.  
and Services Available:

### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

USFWS South Bay Refuge may be a useful field post and staging area. Cargill Salt is another proximal location providing use can be

**COMMUNICATIONS LIMITATIONS / PROBLEMS:** X No Problems Radio Pager Cell phone

### ADDITIONAL COMMENTS



## POTENTIAL SITE PROTECTION STRATEGY - LEGEND

SITE NAME: COYOTE CREEK

SITE NUMBER: A-2-204

- Path of Oil
- Curtain Boom
- Skimmer
- Shoreline Oil Recovery Area

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# Palo Alto Marsh - Site Summary

2-251-A

County: Santa Clara  
USGS: Mountain View

GRP: Latitude 37 28 N Longitude 122 06 W  
OSPR Map: Last ACP Update 7/01/1996

## SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)

Palo Alto Marsh lies on the southwest shore of South San Francisco Bay, immediately south of the Dumbarton Bridge to Mayfield Slough. Cordgrass saltmarsh and mudflats bisected by several channels, including San Francisquito Creek. The site is part of the City of Palo Alto's Baylands Nature Preserve. The site is fronted by extensive very shallow mudflats.

## SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)

"A" priority all year. Endangered species are present all year.

## RESOURCES AT RISK

### HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )

This is a saltmarsh habitat primarily composed of cordgrass and pickleweed and supports a rich variety of species including numerous T & E species.

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

Sensitive bird species found here include: Endangered - California clapper rail, California brown pelican, peregrine falcon, California least tern; Threatened - western snowy plover; California Species of Special Concern: saltmarsh common yellowthroat, Alameda song sparrow. Also, large numbers of a wide variety of birds nest and winter here: shorebirds, waterfowl, wading birds, and waterbirds.

Sensitive mammals species found here include: Endangered - salt marsh harvest mouse; Other rare species - saltmarsh wandering shrew.

San Francisquito Creek supports the largest and one of the few remaining steelhead runs in San Francisco Bay. Sensitive plant species found here include: the Delta tule pea, (*Lathyrus jepsonii* ssp. *jepsonii*), northcoast bird's-beak (*Cordylanthus maritimus* ssp. *Palustris*), and the proposed endangered plant, (*Suaeda californica*).

## CULTURAL and ARCHEOLOGICAL SENSITIVITIES

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance

Type	Name	Organization	Phone	FAX
ELO	Deborah Bartens	Baylands Nature Preserve	(415) 329-2506	
EL	Bob Douglas or Chuck Taylor	Cargill Salt	(510) 790-8156	
	H. C. Dr. Monroe	College of San Mateo	(650) 574-6161	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
L		Palo Alto Boat Works at Cooley Landing		
BTE	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
ELO	City of Mountain View	Shoreline Park Dispatch	(415) 903-6395	
B	Dr Peter Baye	USFWS Ecological Services	(707) 562-3003	

## 2-251 -A Palo Alto Marsh - Site Strategy

County: Santa Clara

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 28 N

Longitude  
122 06 W

### SITE LOCATION: boundaries, landmarks, area to locate and delimit the site

Palo Alto Marsh lies on the southwest shore of South San Francisco Bay, immediately south of the Dumbarton Bridge to Mayfield Slough.

### HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site

Aircraft beware of Airport traffic and overhead power lines nearby; vessels beware of shallow water; pilings and debris on mudflat.

### POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS: (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

Primary concern is to exclude oil from entering the interior marsh via channels. Second concern is oiling of this low energy marsh front.

Also of concern is damage to marsh from response activities: trampling marsh vegetation, disturbing sensitive species, and trampling of oil into sediments.

## SITE STRATEGIES

### Strategy 2-251.1

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/05/1995 07/01/1997

#### Objective or Prevention Condition

Exclude oil from entering the entrances to Palo Alto Marsh and San Francisquito Creek, if time to impact does not permit its deployment or If tidal barrier boom (strategy 2-251.1) should fail.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

ALTERNATIVES: It is critical that channel entrances leading into Palo Alto Marsh (Baylands Nature Preserve) and San Francisquito Creek be blocked, and also, the small tidal inlets to the marsh north of Cooley Landing. Deploy lengths of appropriate curtain boom and block channel mouths with curtain boom, swamp boom, sorbent boom, or combination thereof.

### Strategy 2-251.2

(USCG Strategic Objective: 8 )

Dates: SISRS Approved last tested ACP date  
03/05/1995 07/01/1996

#### Objective or Prevention Condition

Protective booming of marsh front to keep oil from impacting marsh and mudflats.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Deploy 9,000 - 10,000 ft of exclusionary tidal barrier boom across the mudflat from Cooley Landing around Sand Point to Mayfield

## Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers -No	special equip	deploy personnel	tending personnel	SO
2-251.2	10000	1000		50-60 / 22#+/danforths	1000	6/3		shallow draft bombast	35-40		8
2-251.1	500	500			500	1/3			9		5

## LOGISTICS

### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Vehicle access is available at two points: Cooley Landing - from Hwy 84 or Hwy 101, exit on University Ave and then bayward on Bay Rd; Palo Alto Baylands Nature Preserve - from Hwy 101 exit on Embarcadero Rd and proceed bayward to terminus.

LAND ACCESS LEVEL: (foot only, 2WD, large truck, 4WD, road limitations...seasonal..locked gates)  
All weather, all vehicle road to site

### WATER LOGISTICS:

Access limitations: depth, obstructions: Very shallow

Boat Launching, Loading, Docking Launch at Mayfield Slough and at Cooley Landing. Larger craft at Redwood City Marina and  
and Services Available: Harbor.

### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Staging at Palo Alto Boat Works and Redwood City Marina or harbor. Also, at public access at mouth of Mayfield Slough.

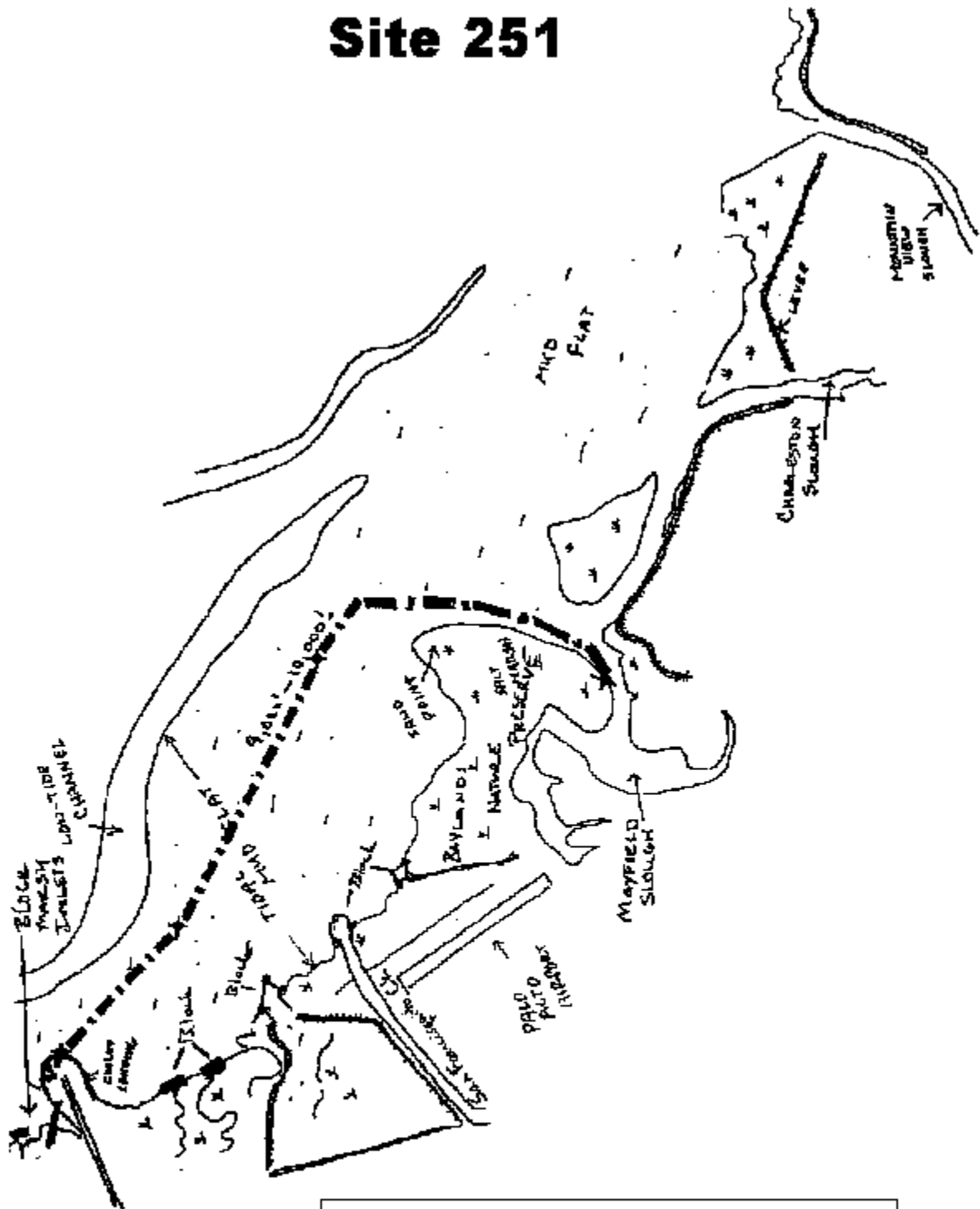
COMMUNICATIONS LIMITATIONS / PROBLEMS: X No Problems Radio Pager Cell phone

### ADDITIONAL COMMENTS

# Site 251

## PROTECTION SITE SKETCH MAP

Two Auto Marsh  
 Site Name SOUTH BAY, CA.  
 Recorder(s) MDH/TMM  
 Date/Time August, 1993  
 Tide Stage -  
 Site Classification 2  
 Site No. 16



### POTENTIAL PROTECTION STRATEGY (FLOOD and EBB TIDE)

===== Tidal Barrier Boom  
 + Anchor Point / Hinge Line

XXXXXXXXXX

Recommended Oil-Catchment Area

V V

Salt-Water Marsh

Fresh-and/or Brackish-Water Marsh

0 1000 2000  
 FEET

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# Charleston and Mayfield Sloughs - Site Summary

2-252-A

**County:** Santa Clara  
**USGS:** Mountain View

**GRP: 2**      **Latitude** 37 27.0 N      **Longitude** 122 05.0 W  
**OSPR Map:** 160      **Last ACP Update** 07/01/1996

## **SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)**

This site includes Mayfield and Charleston Sloughs, including the bay frontage adjacent and open to Charleston Slough, and all inland tributary marshes. These sloughs are on the southwest shore of South San Francisco Bay, four miles south of the Dumbarton Bridge. The old Palo Alto Yacht Harbor is located on Mayfield Slough. Both sloughs have fringing cordgrass and pickleweed marshes at their mouths and along their banks. These sloughs network over 200 acres of saltmarsh.

## **SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)**

"A" priority year-round. Saltmarsh and Special Status wildlife are present and vulnerable throughout the year.

## **RESOURCES AT RISK**

### **HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )**

This extensive marsh is cordgrass and pickleweed saltmarsh supporting endangered species throughout year.

### **SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)**

Sensitive bird species found here include: California clapper rail, California brown pelican, peregrine falcon, California least tern, western snowy plover, saltmarsh common yellowthroat. Also, large numbers of a wide variety of birds nest and winter here: shorebirds, waterfowl, wading birds, and waterbirds.

Sensitive mammals species found here include: Endangered - salt marsh harvest mouse; Other rare species - saltmarsh wandering shrew; and harbor seals haul out here.

The mudflats are important habitat for fish, shellfish, and infauna.  
Predominant marsh species here are cordgrass and pickleweed.

## **CULTURAL and ARCHEOLOGICAL SENSITIVITIES**

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## **KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance**

Type	Name	Organization	Phone	FAX
ELT	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
EBT	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
EBT	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
B	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	
LO	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

# 2-252 -A Charleston and Mayfield Sloughs - Site Strategy

County: Santa Clara

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 27.0 N

Longitude  
122 05.0 W

## SITE LOCATION: boundaries, landmarks, area to locate and delimit the site

This site includes Mayfield and Charleston Sloughs, including the bay frontage adjacent and open to Charleston Slough, and all inland tributary marshes.

## HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site

## POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS: (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

Primary concern is that oil will enter Mayfield and Charleston, exposing extensive saltmarsh, mudflats, and wildlife to oil. Strategies are designed to exclude oil from being transported to inner marsh by deflecting to skimmers and by exclusion booming. Secondary concern is oiling of marsh front. Also of concern is damage to marshes and soft slough bottoms from response activity. Avoid trampling marsh and trampling oil into soft sediments.

## SITE STRATEGIES

### Strategy 2-252.1

(USCG Strategic Objective: 6 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Deflect oil away from marshes to skimmers.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. Deploy 2000' of 18"+ deflection curtain boom across entrance to Mayfield and Charleston Sloughs.
  2. Place skimmer in J-hook of boom on north side of channel near small boat dock.
  3. Deploy 500' of 18"+ deflection curtain boom across the north entrance of Charleston Slough at the confluence of Mayfield Slough.
- Create a J-hook against levee and place skimmer or vac truck there.

### Strategy 2-252.2

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Exclude oil from entering Charleston Slough

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Deploy 1200' of 18" or smaller curtain boom across southern entrance to Charleston Slough. Place boom along power line tower supports and foot bridge. Back with sorbent booms.

### Strategy 2-252.3

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Close all tide gates and salt pond intake structures to exclude oil from expanding to inner marshes and impoundments.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. Close large flood gates near confluence of sloughs and flood gate under road near Baylands Nature Preserve Interpretive Center (operated by City of Mountain View).
2. Notify Cargill Salt Co. to close saltwater intake culverts (2x48") on east side of Charleston Slough.

## Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers -No	special equip	deploy personnel	tending personnel	SO
2-252.1	2500			7/25#/danforth	500	2/1	SSS	2 Shallow draft Bboats & skiffs	10 - 15 people	continuous	6
2-252.2		1200		5/25+/danforths	1200	1/1					5
2-252.3	0	0		0	0	0		close flood gates	2		5

## LOGISTICS

### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From Hwy 101 in Palo Alto, exit east bound on Embarcadero, past airport to Mayfield public access. Public access area and dock are at mouth of Mayfield Slough. Mountain View Parks Dept. has access roads to south side of Charleston Slough. Possible access at Palo Alto

**LAND ACCESS LEVEL:** (foot only, 2WD, large truck, 4WD, road limitations...seasonal...locked gates)  
All traffic when levees are dry

### WATER LOGISTICS:

Access limitations: depth, obstructions: shallow draft

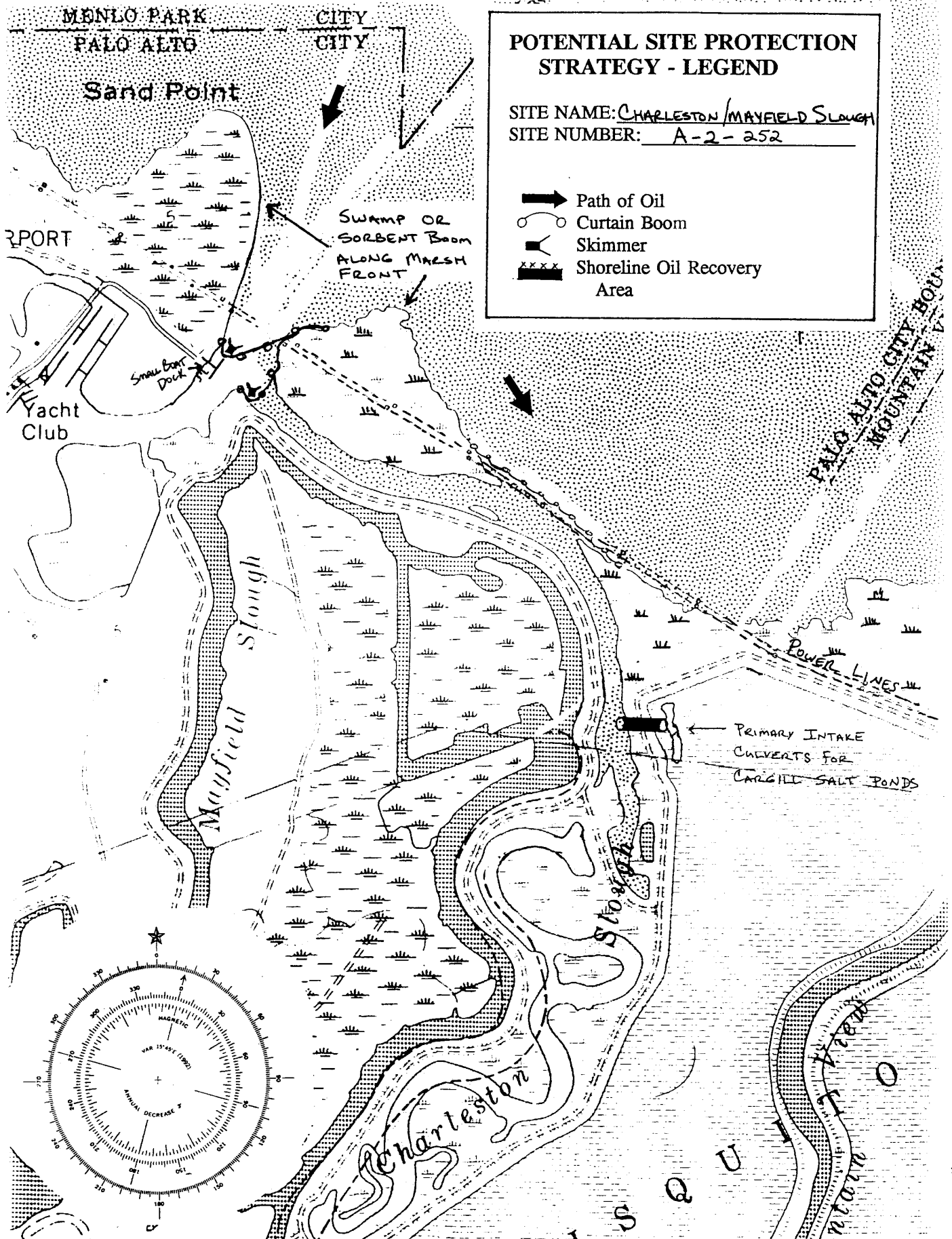
Boat Launching, Loading, Docking Redwood City and Palo Alto Boat Works for launch of large vessels; Mayfield Slough public and Services Available: access area; hand launched vessels at Mayfield Slough dock

### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Possibly Palo Alto Boat Works could be used as a staging area. Also, Mayfield Slough public access area.

**COMMUNICATIONS LIMITATIONS / PROBLEMS:** X No Problems Radio Pager Cell phone

### ADDITIONAL COMMENTS



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# Mountain View Slough - Site Summary

2-253-A

County: Santa Clara  
USGS: Mountain View

GRP: 2      Latitude 37 27.0 N      Longitude 122 05.0 W  
OSPR Map: 160      Last ACP Update 07/01/1996

## **SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)**

This site includes Mountain View Slough to Hwy 101, and the bay frontage for a half mile on each side of its mouth, and the extensive mudflat at the mouth. It is located on the southwest shore of South San Francisco Bay, four miles south of Dumbarton Bridge. This slough has a fringing cordgrass and pickleweed marsh at the mouth and along its banks. An extensive mudflat, over 1 mile wide, extends from the mouth out to the main channel.

## **SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)**

Year-round vulnerability to saltmarsh, mudflat, and Special Status Species (see Resources at Risk).

## **RESOURCES AT RISK**

### **HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )**

The chordgrass and pickleweed marsh at the mouth and along the slough channel are habitat for diverse species including some Special Status Species. The fronting mudflat and channel bottom supports a rich biota.

### **SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)**

Sensitive bird species found here include: California clapper rail, California brown pelican, peregrine falcon, California least tern, western snowy plover, saltmarsh common yellowthroat, Alameda song sparrow. Also, large numbers of a wide variety of birds nest and winter here: shorebirds, waterfowl, wading birds, and waterbirds.

Sensitive mammals species found here include: Endangered - salt marsh harvest mouse; Other rare species - saltmarsh wandering shrew. Harbor seals haul out here.

The sloughs and mudflats are important habitat for fish, shellfish and infauna.

## **CULTURAL and ARCHEOLOGICAL SENSITIVITIES**

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## **KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance**

Type	Name	Organization	Phone	FAX
ELT	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
EBT	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
EBT	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
B	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	
LO	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

# 2-253 -A Mountain View Slough - Site Strategy

County: Santa Clara

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 27.0 N

Longitude  
122 05.0 W

## SITE LOCATION: boundaries, landmarks, area to locate and delimit the site

This site includes Mountain View Slough to Hwy 101, and the bay frontage for a half mile on each side of its mouth, and the extensive mudflat at the mouth.

## HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site

Aircraft beware of overhead powerlines in the area. Watercraft be aware: the outlet to the bay is mostly silted in and undefined, and the water is shallow; the extensive mudflat is over 1 mile wide.

## POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS: (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

The many rare and endangered birds, animals and plants living here are threatened by oil and oil spill response and trampling. Primary concern is to exclude oil from entering the Slough. Secondary concern is to minimize the exposure of the marshes fronting the bay by protective booming. Additional impacts from response and cleanup, and tramping of oil into soft marsh and mudflat sediments are of concern.

## SITE STRATEGIES

### Strategy 2-253.1

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Exclude oil from entering Slough and small marsh channels.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. Deploy several (3-4) layers of 4x4 swamp boom in an inverted "V" formation (chevron exclusion) at mouth of slough. Deploy sorbent boom between each layer of containment boom. Anchor with conventional anchors and stakes.
2. Place fence booms in small marsh channels.
3. Notify Cargill Salt to close all salt water intake culverts to the salt ponds.

NOTE: Airboat, hovercraft, helicopter deployment may be the only way to gain access to this site. In summer (dry season) it may be possible to deploy from south levee near towers.

### Strategy 2-253.2

(USCG Strategic Objective: 8 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Shore line protection booming.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Deploy bushy boom, oil snare, swamp boom or sorbent boom along marsh front. Anchor and stake in place.

## Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-253.1	1500			12/22+/danforth c chain; stakes	4000	0/2			hovercraft or air boat may be	6-8 PEOPLE	daily	5
2-253.2		2000		4/22+/danforth ; stakes		0/2			hovercraft or airboats may be	8		8

## LOGISTICS

### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From Hwy 101, exit at Shoreline Blvd/Sterlin Rd and proceed bayward to Shoreland at Mountain View Park. Vehicle access is restricted: for levee road access contact City of Mountain View or Cargill Salt Co.

LAND ACCESS LEVEL: (foot only, 2WD, large truck, 4WD, road limitations...seasonal..locked gates)  
2WD,LG TRK,4WD,ATV when levees are dry.

### WATER LOGISTICS:

Access limitations: depth, obstructions: EXTREME SHALLOW WATER

Boat Launching, Loading, Docking Boat launch ramps at Redwood City. Small hand launched boats can deploy from the south and Services Available: levee during summer (dry season). Also, small craft launch at Mayfield Slough.

### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:





Staging at Port of Redwood City or public access at Mayfield Slough.

COMMUNICATIONS LIMITATIONS / PROBLEMS: X No Problems Radio Pager Cell phone

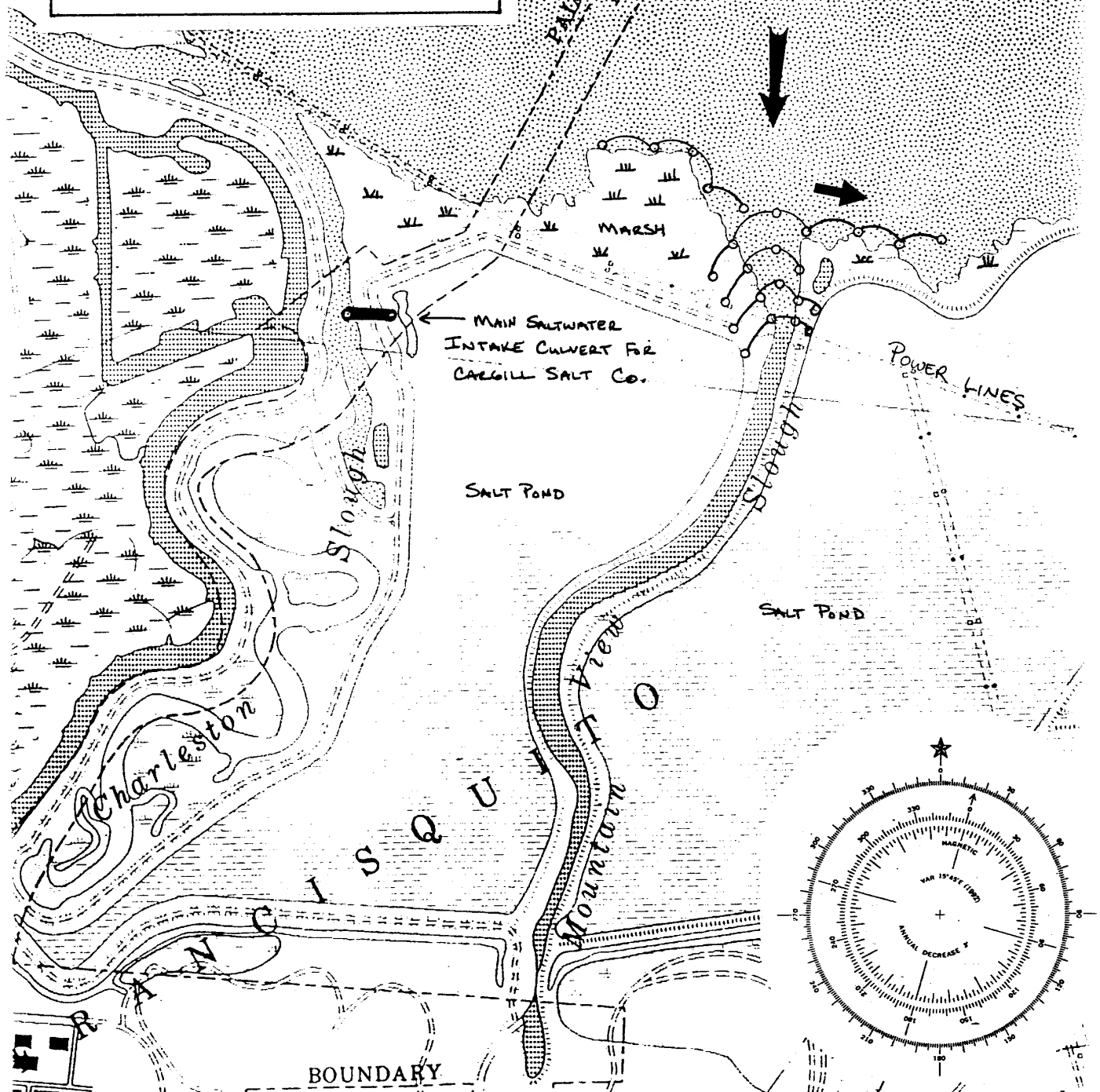
### ADDITIONAL COMMENTS

# POTENTIAL SITE PROTECTION STRATEGY - LEGEND

SITE NAME: MOUNTAIN VIEW SLOUGH  
SITE NUMBER: A-2-253

-  Path of Oil
-  Curtain Boom
-  Skimmer
-  Shoreline Oil Recovery Area

Area



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# Stevens Creek - Site Summary

2-254-A

County: Santa Clara  
USGS: Mountain View

GRP: 2      Latitude 37 27.0 N      Longitude 122 04.0 W  
OSPR Map: 158-160      Last ACP Update 07/01/1996

## **SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)**

Site includes creek and marshes that fringe the banks inland (1.5 miles) to Hwy 101 and three quarters of a mile of bay frontage each side of the creek mouth. Located in the extreme South San Francisco Bay between Guadalupe Slough and Mountain View Slough, the creek channel is bounded by levees. Tidal action extends about 1.5 miles upstream. Cargill salt evaporator ponds border the bayward half of the channel, while the landward channel is industrialized to different degrees. There are very extensive mudflats (up to a mile wide) in front of creek.

## **SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)**

An "A" priority for protection year-round due to saltmarsh, mudflats, and presence of special status species/habitat. Cargill salt water pond intake culverts throughout So. Bay area.

## **RESOURCES AT RISK**

### HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )

The salt marsh at this site supports marsh species which are sensitive and vulnerable entire year. The other major habitat of concern are the extensive shallow mudflats.

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

This site supports a rich bird life including the Endangered California clapper rail and a variety of herons, shorebirds and waterfowl.

The salt marsh harvest mouse occurs in this area.

The mudflat are habitat for a diverse infauna (clams, worms, etc.) and are foraging habitat for fish and birdlife.

## **CULTURAL and ARCHEOLOGICAL SENSITIVITIES**

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## **KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance**

Type	Name	Organization	Phone	FAX
E/L/T	Chuck Taylor	Cargill Salt	(510) 790-8154	
B/T/E	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B/T/E	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
L/O	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

## 2-254 -A Stevens Creek - Site Strategy

Latitude Longitude  
37 27.0 N 122 04.0 W

### SITE LOCATION: boundaries, landmarks, area to locate and delimit the site

Site includes creek and marshes that fringe the banks inland (1.5 miles) to Hwy 101 and three quarters of a mile of bay frontage each side of the creek mouth.

### HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site

Aircraft beware of high power wires in the area. Vessels be aware of shallow water.

### POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS: (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

The concern is oil and response impacts to marsh, wildlife, and rare and endangered birds, animals and plants which are present year-round. Primary objective is to minimize exposure by excluding oil from entering Stevens Creek. Secondary objective is to minimize exposure and impacts to bay frontage marshes by protective booming. Always of concern is the impacts resulting from response and cleanup: avoid trampling marsh and sensitive plants and animals, avoid disturbing soft mudflats, and avoid trampling oil into marsh and mud.

## SITE STRATEGIES

### Strategy 2-254.1

(USCG Strategic Objective: 5 ) Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Exclude oil from entering the creek. Deflect oil down-coast.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Deploy several (3-4) layers of 4x4 swamp boom in an inverted "V" formation (chevron) at mouth of creek. Place Sorbent booms between each layer. Responders may be able to use tidal barrier boom straight across mouth.

### Strategy 2-254.2

(USCG Strategic Objective: 8 ) Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1997

#### Objective or Prevention Condition

Protective booming of marsh front

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Line bayfront marshes w/ bushy boom, oil snare or sorbent boom.

### Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-254.1	400			anchors & stakes	800	0/2				3-4	daily	5
2-254.2				snare 7000	7000							8

## LOGISTICS

### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From Hwy 101, exit at Shoreline Blvd/Sterlin Rd and proceed bayward to Shoreland at Mountain View Park. Further vehicle access is restricted: for levee road access contact City of Mountain View or Cargill Salt Co.

LAND ACCESS LEVEL: (foot only, 2WD, large truck, 4WD, road limitations...seasonal...locked gates)  
LG TRUCK, 2WD : Levee roads impassable in winter.

### WATER LOGISTICS:

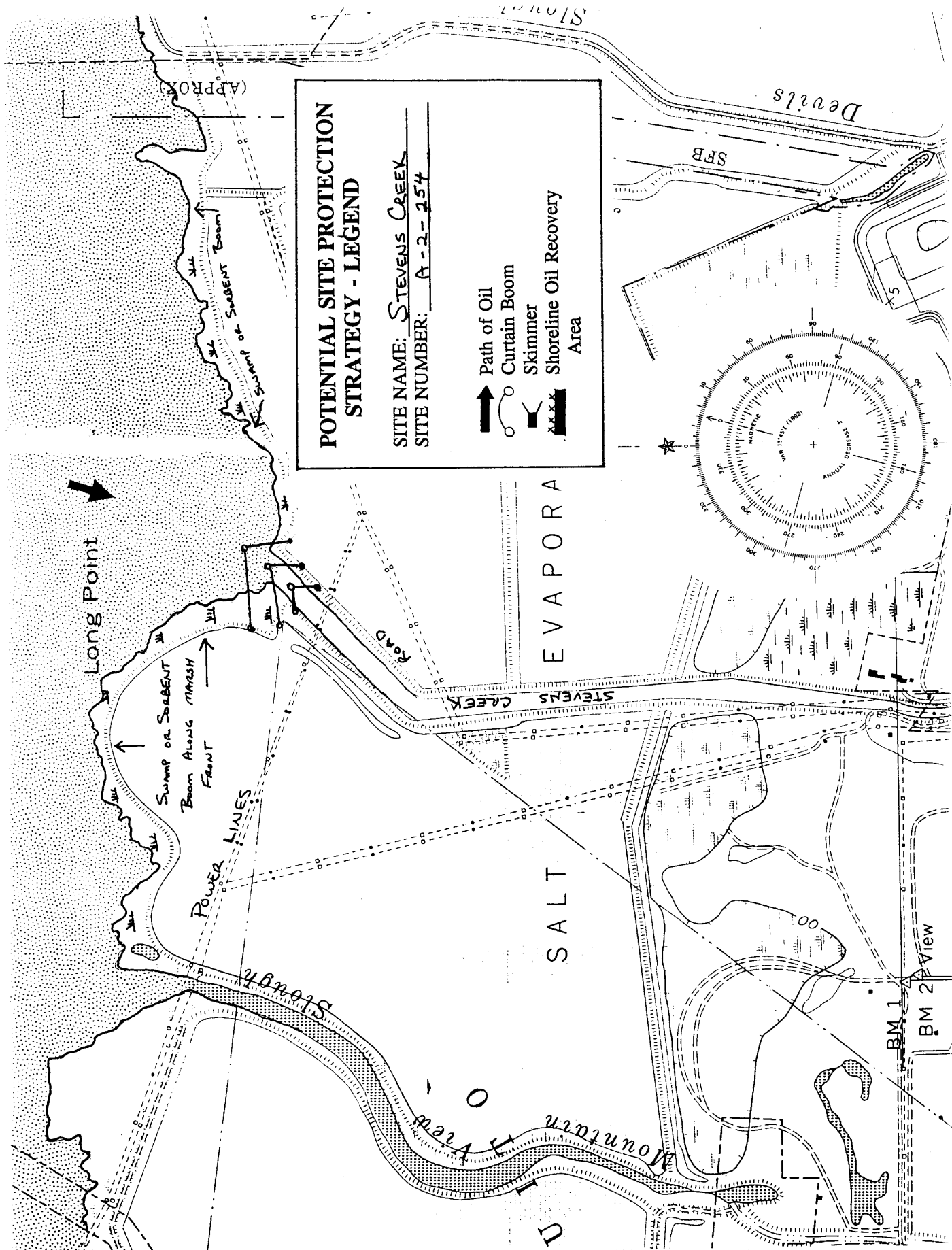
Access limitations: depth, obstructions: VERY SHALLOW/NO AC AT LOW TIDE  
Boat Launching, Loading, Docking Launch skiffs upstream at mid to high tide.  
and Services Available:

### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Stage upstream in business parking area..

COMMUNICATIONS LIMITATIONS / PROBLEMS: X No Problems Radio Pager Cell phone

### ADDITIONAL COMMENTS



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# Guadalupe Slough - Site Summary

2-255-A

County: Santa Clara  
USGS: Mountain View

GRP: 2 Latitude 37 27.0 N Longitude 122 02.0 W  
OSPR Map: 160 Last ACP Update 07/01/1996

## SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)

Guadalupe Slough extends from its mouth on Coyote Creek inland about five miles to Sunnyvale Baylands County Park and beyond through the City of San Jose. This site is a large channel on the southwest shore of South San Francisco Bay, four miles southeast of the Dumbarton Bridge. It has marshes and mudflats near its mouth and along its banks, chordgrass and pickleweed marshes on both sides. This large levee-bound slough is a navigable waterway with strong currents near the mouth. Cargill Salt Co. evaporation ponds border most of the length of this slough.

## SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)

"A" priority year-round due to vulnerable saltmarsh plants and wildlife (see Resources at Risk).

## RESOURCES AT RISK

### HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )

There are saltmarshes (Spartina and Salicornia) and mudflats along the bay frontage and the length of the slough which are vulnerable to oil impacts.

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

Sensitive bird species found here include: Endangered - California clapper rail, California brown pelican, peregrine falcon, California least tern; Threatened - western snowy plover; California Species of Special Concern: saltmarsh common yellowthroat, Alameda song sparrow. Also, large numbers of a wide variety of birds nest and winter here: shorebirds, waterfowl, wading birds, and waterbirds.

Sensitive mammals species found here include: California Species of Special Concern - saltmarsh wandering shrew.

The drainage supports a small run of chinook salmon. The mudflats have a rich infauna and is important habitat for fish and wading birds.

Shellfish.

## CULTURAL and ARCHEOLOGICAL SENSITIVITIES

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance

Type	Name	Organization	Phone	FAX
T/E/L	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
B/T/E	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B/T/E	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
B	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	
L/O	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

# 2-255 -A      Guadalupe Slough - Site Strategy

County: Santa Clara

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 27.0 N

Longitude  
122 02.0 W

## SITE LOCATION: boundaries, landmarks, area to locate and delimit the site

Guadalupe Slough extends from its mouth on Coyote Creek inland about five miles to Sunnyvale Baylands County Park and beyond though the City of San Jose.

## HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site

Aircraft beware of overhead powerlines in area. Vessels be aware of strong currents exist near the mouth and shallow mudflats.

Vehicles be aware that levees are impassable in wet winters.

## POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS: (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

The concern is oil and response impacts to marsh, wildlife, and rare and endangered birds, animals and plants which are present year-round. Primary objective is to minimize exposure by excluding oil from entering Guadalupe Slough. Secondary objective is to minimize exposure and impacts to bay frontage marshes by protective booming. Always of concern is the impacts resulting from response and cleanup: avoid trampling marsh and sensitive plants and animals, avoid disturbing soft mudflats, and avoid trampling oil into marsh and mud. Notify Cargill Salt Co. to close any water intake structures

## SITE STRATEGIES

### Strategy 2-255.1

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Prevent oil from entering Guadalupe Slough and adjacent marshes.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. Deploy 2500 ft of 18" curtain boom from both levees towards skimmer in part of channel with slow current. Use tidal barrier or swamp boom across marsh and mudflat. Strong currents will make location of equipment upstream from mouth probable.

ALTERNATIVE: Use several layers (2-3) of 4x4 swamp boom (7500 ft) with less skirt in strong currents. Use same configuration as in step 1.

2. Place skimmers outside mouth in deeper water near confluence of Coyote Creek and Guadalupe Slough.

### Strategy 2-255.2

(USCG Strategic Objective: 8 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Protective booming of bayfrontage marshes from oiling and oil intrusion.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

To minimize oil entering slough along fringing tidal marsh, deploy 500 ft of sorbent or swamp boom along marsh front outside mouth in both directions.

## Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-255.1	2500	7500				2/2	SPS or SFS		2	32 people	continuous	5
2-255.2		1000				0/2				8		8

## LOGISTICS

### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

From Hayward-San Mateo Bridge, take hwy 101 south to hwy 237 east. Exit at Caribbean Drive and proceed to Borregas Avenue.

Contact City of Sunnyvale Water Pollution Control Plant (see add'l contact list). Access restricted by NASA and the US Navy.

LAND ACCESS LEVEL: (foot only, 2WD, large truck, 4WD, road limitations...seasonal...locked gates)  
2WD, LG TRK, 4WD

### WATER LOGISTICS:

Access limitations: depth, obstructions: POSSIBLE AT LOW TIDE ONLY

Boat Launching, Loading, Docking and Services Available: Small boat ramp at NASA fuel barge dock upstream: entry by permission only through Moffett Field; road is paved. Redwood City launch ramp for all size boats.

### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:





There is a small staging area at NASA fuel barge dock. Larger staging may be arranged at Moffatt Field.

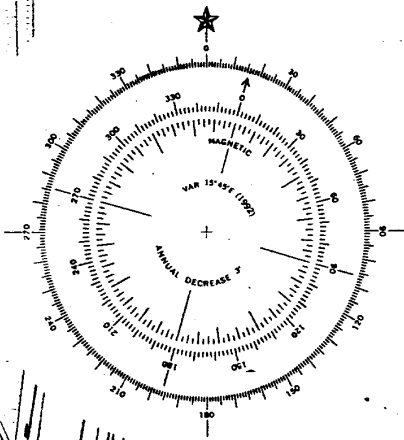
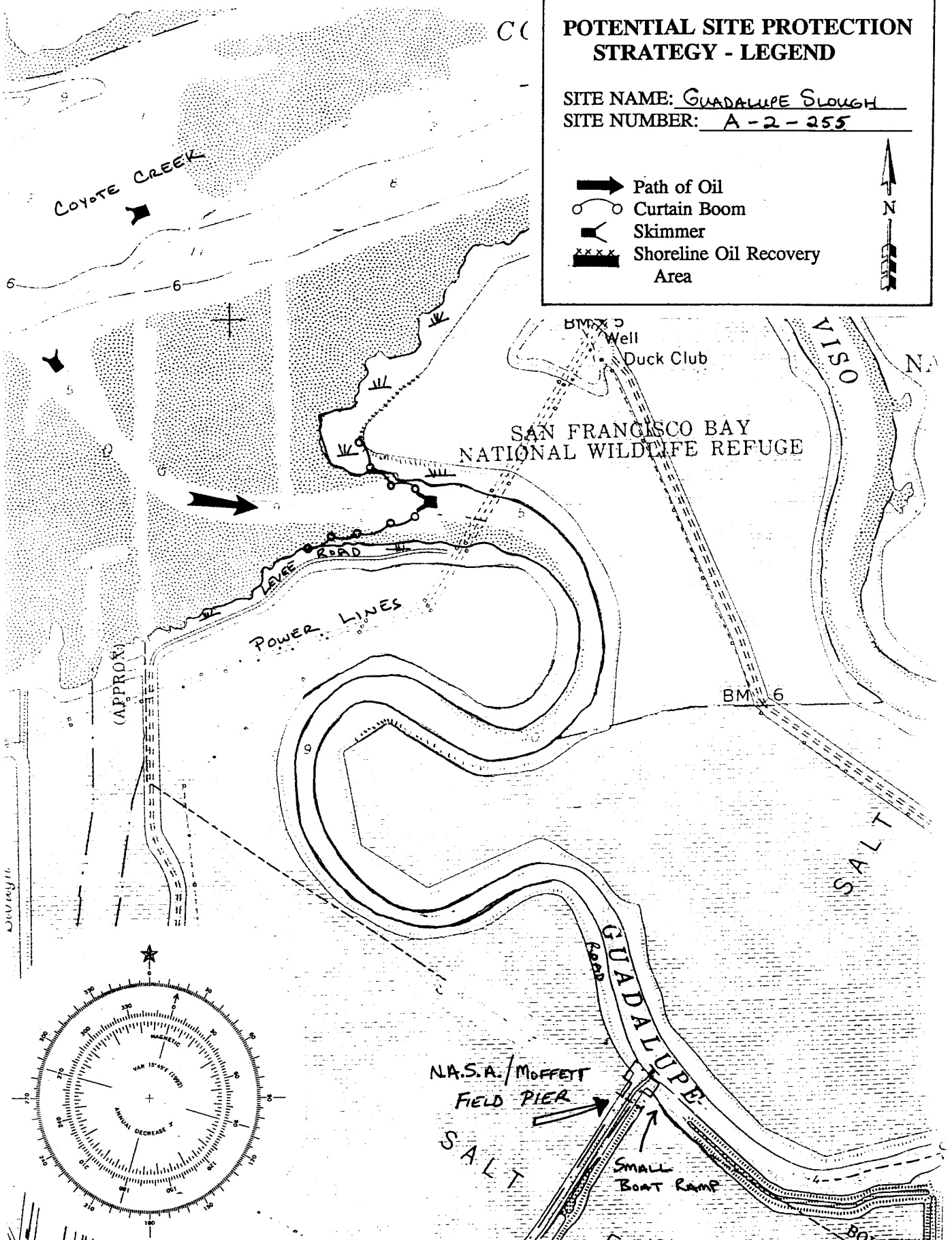
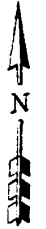
COMMUNICATIONS LIMITATIONS / PROBLEMS: X No Problems Radio Pager Cell phone

### ADDITIONAL COMMENTS

# POTENTIAL SITE PROTECTION STRATEGY - LEGEND

SITE NAME: GUADALUPE SLOUGH  
SITE NUMBER: A-2-255

-  Path of Oil
-  Curtain Boom
-  Skimmer
-  Shoreline Oil Recovery Area



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# Alviso Slough - Site Summary

2-256-A

County: Santa Clara  
USGS: Mountain View

GRP: Latitude 37 27.0 N Longitude 122 01.0 W  
OSPR Map: 160 Last ACP Update 07/01/1996

## SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)

Site extends from the mouth on Coyote Creek inland for about six miles to the railroad track at Vaviso Marina. This is a waterway with marshes and mudflats near its mouth and along its banks. Alviso Slough is a water channel on the southwest shore of south San Francisco Bay, five miles southeast of the Dumbarton Bridge. It is a tributary to Coyote Creek surrounded by saltmarsh. The northeasterly and first two miles of west margins are San Francisco National Wildlife Refuge.

## SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)

This site has " A " sensitivity level throughout the year because of saltmarsh habitat and sever Special Status Species which reside here.

## RESOURCES AT RISK

### HABITATS AT RISK:(biological habitats including time of year when most sensitive and vulnerable )

There are pickleweed and cordgrass marshes along the slough.

### SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)

Sensitive bird species found here include: Endangered - California clapper rail, California brown pelican, peregrine falcon, California least tern; Threatened - western snowy plover; Calfinoria Species of Special Concern: saltmarsh common yellowthroat, Alameda song sparrow. Also, large numbers of a wide variety of birds nest and winter here: shorebirds, waterfowl, wading birds, and waterbirds.

Sensitive animal species found here include: Endangered - salt marsh harvest mouse and CA Species of Special Concern -salt marsh wandering shrew.

Shellfish, fish

## CULTURAL and ARCHEOLOGICAL SENSITIVITIES

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance

Type	Name	Organization	Phone	FAX
T/E/L	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
B/T/E	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B/T/E	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
B	Valerie Layne	San Francisco Bird Observatory	(650) 728-5816	
L/O	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

## 2-256 -A Alviso Slough - Site Strategy

Santa Clara

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 27.0 N

Longitude  
122 01.0 W

**SITE LOCATION:** boundaries, landmarks, area to locate and delimit the site

Site extends from the mouth on Coyote Creek inland for about six miles to the railroad track at Vaviso Marina.

### HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site

Be aware of overhead powerlines and shallow water. Head of slough at marina almost completely silted in.

### POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS: (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

The concern is oil and response impacts to marsh, wildlife, and rare and endangered birds, animals and plants which are present year-round. Primary objective is to minimize exposure by excluding oil from entering Alviso Slough. Secondary objective is to minimize exposure and impacts to bay frontage marshes by protective booming. Always of concern is the impacts resulting from response and cleanup: avoid trampling marsh and sensitive plants and animals, avoid disturbing soft mudflats, and avoid trampling oil into marsh and mudflats.

### SITE STRATEGIES

#### Strategy 2-256.1

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Collection booming to prevent oil from entering Alviso Slough.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Deploy 600' of 18"+ curtain boom from both levees to skimmer in mid-channel. Use 400' of tidal barrier boom or swamp boom across marsh and mudflat.

#### Strategy 2-256.2

(USCG Strategic Objective: 7 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Deflect oil past slough and keep oil in Coyote Creek for skimming.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. Deflection boom (400' 18"+ Hboom), using 100' segments, along south shore of Coyote Creek to keep oil away from Alviso Slough and in deep water.
2. Deploy boom and skimmers near power line towers for collection.

#### Strategy 2-256.3

(USCG Strategic Objective: 8 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### Objective or Prevention Condition

Protective booming of marsh front near mouth.

#### Technique Details

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

Line marsh front near mouth with swamp and sorbent boom (2000').

### Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-256.1	600	400		Anchors and stakes		1/2	SFS		2	8 - 10 people	with tidal change	5
2-256.2	400					1/0	SFS		1			7
2-256.3	0	0			2000	02						8

### LOGISTICS

#### DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)

Take Hwy 880 south to Hwy 237 west and exit at Zanker Road. Turn right on Zanker Road to Esteros Road. Follow Esteros Road to Access Road which leads to the Alviso Slough. Roadway access is secured by a locked gate. Contact San Jose/Santa Clara Water Pollution Control to gain entry. 700 Esteros Road, San Jose, CA (408) 945-5300 (24 hours). Access to levee from SFBNWR and Cargill

**LAND ACCESS LEVEL:** (foot only, 2WD, large truck, 4WD, road limitations...seasonal..locked gates)  
4WD

#### WATER LOGISTICS:

Access limitations: depth, obstructions: SHALLOW DRAFT VESSELS <6'

Boat Launching, Loading, Docking Small boats at high tide at Alviso Marina (may be silted in). Redwood City launch ramp for all boats.  
and Services Available:

#### FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:

Redwood City Harbor and Marina.

#### COMMUNICATIONS LIMITATIONS / PROBLEMS:

X No Problems Radio Pager Cell phone





#### ADDITIONAL COMMENTS

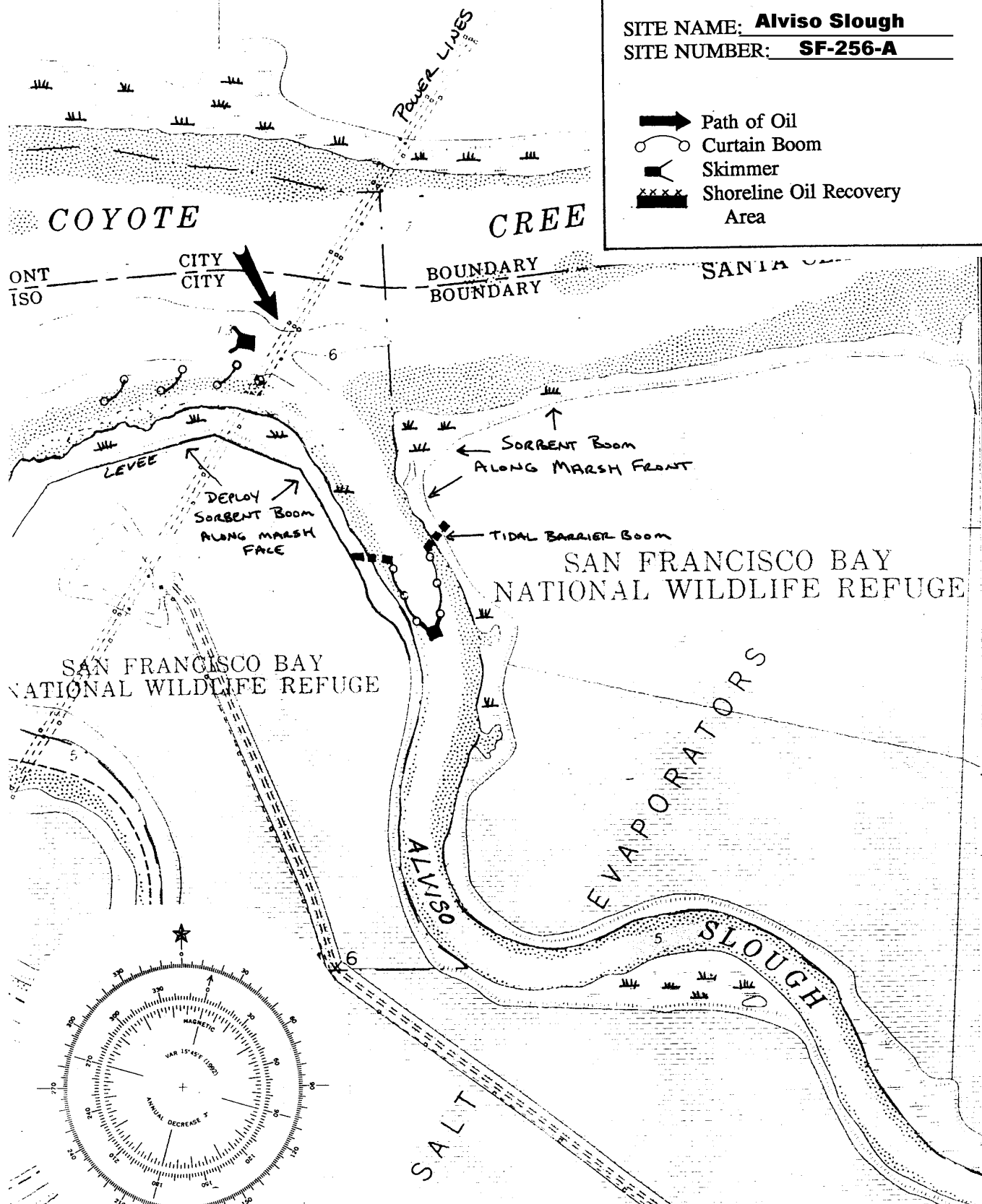
T EVAPORATORS

# POTENTIAL SITE PROTECTION STRATEGY - LEGEND

SITE NAME: **Alviso Slough**

SITE NUMBER: **SF-256-A**

-  Path of Oil
-  Curtain Boom
-  Skimmer
-  Shoreline Oil Recovery Area



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# Mallard Slough - Site Summary

2-257-A

County: Santa Clara  
USGS: Milpitas

GRP: 2      Latitude 37 27.0 N      Longitude 121 58.0 W  
OSRP Map: 000      Last ACP      07/01/1995

## **SITE DESCRIPTION: (general characterization of site - geomorphology, habitat, exposure, currents)**

This Slough is a tributary of Coyote Creek (SF-204) in the extreme end of south San Francisco Bay. It extends from its confluence with Coyote Creek upstream to the outfall of the San Jose Sewage Treatment Plant (STP). Mallard Slough has fresh and brackish marshes along its banks due to the freshwater input from the San Jose STP (the largest freshwater source for South San Francisco Bay). This freshwater inflow maintains brackish conditions for most of Coyote Creek. The slough is leveed, resulting in strip marshes along the banks. Cargill salt evaporation ponds flank the slough, and the STP and urban development form its headwaters. Most of the Slough is in South San Francisco Bay National Wildlife Refuge.

## **SEASONAL and SPECIAL RESOURCE CONCERNS (seasonal issues, special status spp present, water intakes)**

This slough is has "A" priority throughout the year; however, it is most vulnerable from 1 April through 31 August when herons are nesting: the egrets and ibises build nests in the tules.

## **RESOURCES AT RISK**

### **HABITATS AT RISK: (biological habitats including time of year when most sensitive and vulnerable )**

This shallow slough is fringed with emergent brackish and freshwater marsh, with shallow fronting mudflats.

### **SPECIES/COMMUNITIES AT RISK (Brief summaries including time of year when most sensitive/vulnerable)**

This is an important rookery for herons and egrets. Over 700 pairs of the following birds nest in the area:  
Snowy Egrets  
Great Egrets  
Black-crowned Night herons  
Little Blue heron  
White-faced ibis

## **CULTURAL and ARCHEOLOGICAL SENSITIVITIES**

For specific information on historic or cultural resources in this area, contact the California Dept of Parks and Recreation - Office of Historic Preservation, Northwest Information Center, (Leigh Jordan, Sonoma State College (707-664-2494))

## **KEY SITE CONTACTS - type: E-ntry/access; B-iological expertise; L-ogistical; C-ultural; T-rustee; or O-ther assistance**

Type	Name	Organization	Phone	FAX
ELT	Chuck Taylor	Cargill Salt	(510) 790-8154	
B	Diane Kopec	Earth Island Institue (seals)	(650) 728-5816	
EBT	Joy Albertson	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
EBT	Margret Kolar	San Francisco Bay National Wildlife Refuge	(510) 792-0222	
B	Janet Hanson	San Francisco Bird Observatory	(650) 728-5816	
LO	Scott Miner	U. S. Army Corps of Engineers	(415) 744-3039	

## 2-257 -A Mallard Slough - Site Strategy

County: Santa Clara

CHART 18654 San Francisco Bay Southern Part

Latitude  
37 27.0 N

Longitude  
121 58.0 W

**SITE LOCATION: boundaries, landmarks, area to locate and delimit the site**

**Update**

This Slough is a tributary of Coyote Creek (SF-204) in the extreme end of south San Francisco Bay. It extends from its confluence with Coyote Creek upstream to the outfall of the San Jose Sewage Treatment Plant (STP).

**HAZARDS and RESTRICTIONS - Air, Water & Ground - things to beware of when approaching or at site**

Vessels should be aware of shallow water: Mud Slough is silted in - no access.

**POTENTIAL OIL IMPACTS - CONCERNS/ ADVICE to RESPONDERS:** (regarding sensitive species present, penetration into marshes or sediments, burial, organism burrows, tidal channel spreading, watertable limitations, collateral impacts)

Concern is to exclude oil from entering the slough. If oil enters the slough and oils marshes, stay out of the slough. Activity should proceed only with presence of Fish and Wildlife experts since this is an important nesting area for herons, especially in April through August: there could be severe impacts from cleanup activity.

### SITE STRATEGIES

#### Strategy 2-257.1

(USCG Strategic Objective: 5 )

Dates: SISRS Approved last tested ACP date  
03/01/1995 07/01/1996

#### **Objective or Prevention Condition**

Protect slough by excluding oil from Coyote Creek. Collect oil at Coyote Creek/Alviso Slough.

#### **Technique Details**

Check here means "No strategy diagram": ( ) Check here means "Contact CCC": ( )

1. In addition to on water skimming near mouth of Coyote Creek and near powerline towers, place 2 lines of deflection boom (2 X 1000) across Mud Slough from north bank to point of land between channels.
2. In Coyote Creek, near confluence with Mud Slough, use deflection harbor boom (1500ft) from both banks to center of channel to skimmer. NOTE: Mud Slough is silted in at low tide and inaccessible to boats. The current tends to flow past Mud Slough and continues up Coyote Creek.

### Table of Response Resources

strategy	hboom	swpbm	xboom	Anchoring	sorb	Bb/skif	skimmers	-No	special equip	deploy personnel	tending personnel	SO
2-257.1	3500			9/22+/danforth		2/2	SPS		1	12-15	daily	5

### LOGISTICS

**DIRECTIONS: to site (by land and/or by water, to nearest launch ramp and are access permits required.)**

Foot and vehicle access: contact SF Bay National Wildlife Refuge. Boat access: approach via Coyote Creek.

**LAND ACCESS LEVEL:** (foot only, 2WD, large truck, 4WD, road limitations...seasonal...locked gates)  
Levee roads can support a wide variety of vehicles during dry months.

#### **WATER LOGISTICS:**

Access limitations: depth, obstructions: VERY SHALLOW WATER

Boat Launching, Loading, Docking Only small boats can be launched from levees. Nearest boat ramp is at Redwood City.  
and Services Available:

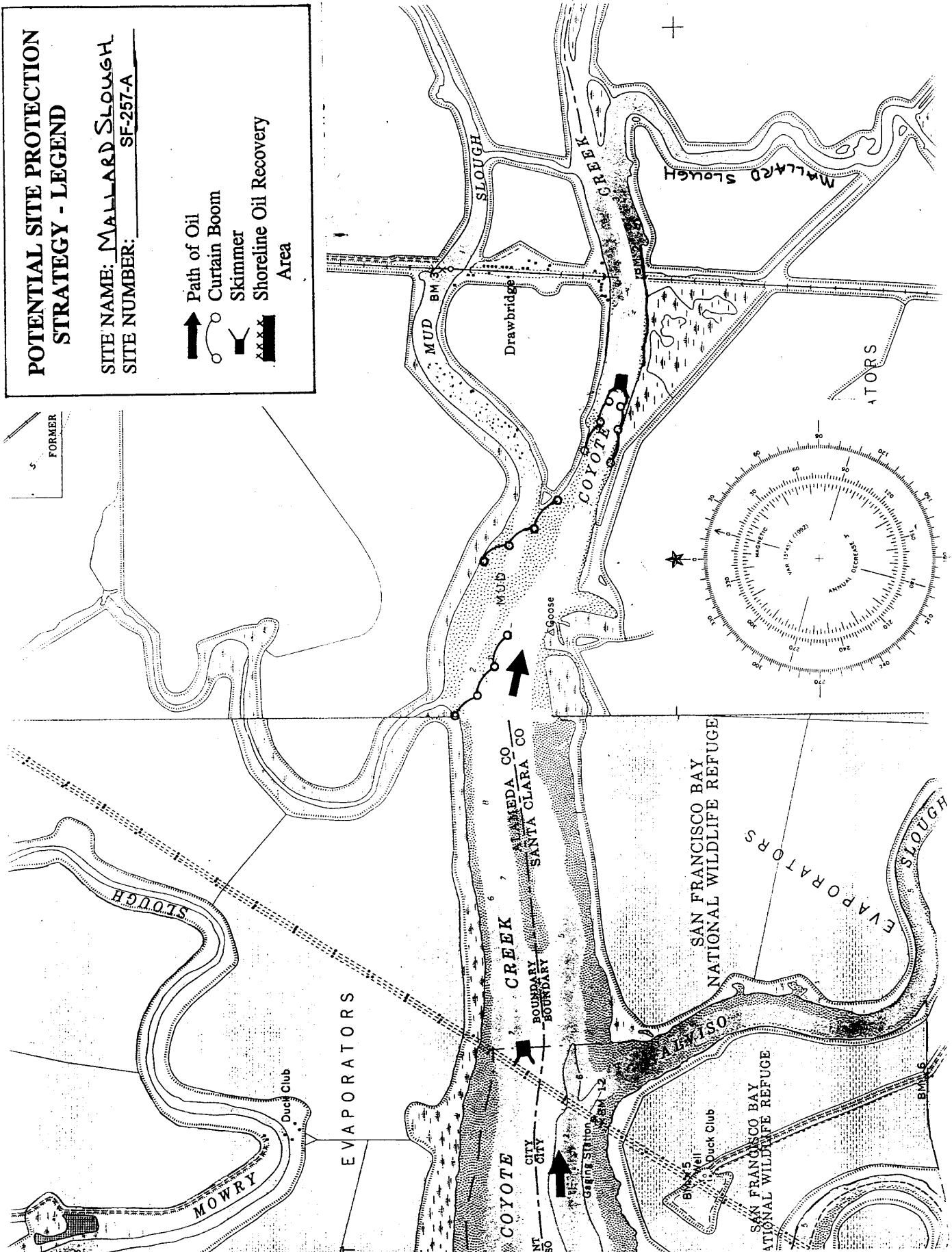
#### **FACILITIES, STAGING AREAS, POSSIBLE FIELD POSTS AND EQUIPMENT AVAILABLE:**

From adjacent levees or Redwood City Harbor.

#### **COMMUNICATIONS LIMITATIONS / PROBLEMS:**

X No Problems Radio Pager Cell phone

#### **ADDITIONAL COMMENTS**



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